S. HRG. 100-997

CURRENT FIRE MANAGEMENT POLICIES

JOINT HEARING

BEFORE THE

SUBCOMMITTEE ON
PUBLIC LANDS, NATIONAL PARKS AND FORESTS

OF THE

COMMITTEE ON
ENERGY AND NATURAL RESOURCES

AND THE

SUBCOMMITTEE ON CONSERVATION AND FORESTRY

OF THE

COMMITTEE ON AGRICULTURE,
NUTRITION, AND FORESTRY
UNITED STATES SENATE

ONE HUNDREDTH CONGRESS

SECOND SESSION

ON

CURRENT FIRE MANAGEMENT POLICIES

SEPTEMBER 29, 1988

S161-20
S311-32

Printed for the use of the Committee on Energy and Natural Resources and the Committee on Agriculture, Nutrition, and Forestry

U.S. GOVERNMENT PRINTING OFFICE

93-715 WASHINGTON : 1989

For sale by the Superintendent of Documents, Congressional Sales Office
U.S. Government Printing Office, Washington, DC 20402

COMMITTEE ON ENERGY AND NATURAL RESOURCES

J. BENNETT JOHNSTON, Louisiana, *Chairman*

DALE BUMPERS, Arkansas
WENDELL H. FORD, Kentucky
HOWARD M. METZENBAUM, Ohio
JOHN MELCHER, Montana
BILL BRADLEY, New Jersey
JEFF BINGAMAN, New Mexico
TIMOTHY E. WIRTH, Colorado
WYCHE FOWLER, JR., Georgia
KENT CONRAD, North Dakota

JAMES A. McCLURE, Idaho
MARK O. HATFIELD, Oregon
LOWELL P. WEICKER, JR., Connecticut
PETE V. DOMENICI, New Mexico
MALCOLM WALLOP, Wyoming
FRANK H. MURKOWSKI, Alaska
DON NICKLES, Oklahoma
CHIC HECHT, Nevada
DANIEL J. EVANS, Washington

DARYL OWEN, *Staff Director*
D. MICHAEL HARVEY, *Chief Counsel*
FRANK M. CUSHING, *Staff Director for the Minority*
GARY G. ELLSWORTH, *Chief Counsel for the Minority*

SUBCOMMITTEE ON PUBLIC LANDS, NATIONAL PARKS AND FORESTS

DALE BUMPERS, Arkansas, *Chairman*
JEFF BINGAMAN, New Mexico, *Vice Chairman*

JOHN MELCHER, Montana
BILL BRADLEY, New Jersey
TIMOTHY E. WIRTH, Colorado
WYCHE FOWLER, JR., Georgia
KENT CONRAD, North Dakota

MALCOLM WALLOP, Wyoming
LOWELL P. WEICKER, JR., Connecticut
MARK O. HATFIELD, Oregon
PETE V. DOMENICI, New Mexico
FRANK M. MURKOWSKI, Alaska
CHIC HECHT, Nevada

J. BENNETT JOHNSTON and JAMES A. McCLURE are Ex Officio Members of the Subcommittee

THOMAS B. WILLIAMS, *Senior Professional Staff Member*
ELIZABETH J. NORCROSS, *Professional Staff Member*

COMMITTEE ON AGRICULTURE, NUTRITION, AND FORESTRY

PATRICK J. LEAHY, Vermont, *Chairman*

JOHN MELCHER, Montana
DAVID H. PRYOR, Arkansas
DAVID L. BOREN, Oklahoma
HOWELL HEFLIN, Alabama
TOM HARKIN, Iowa
KENT CONRAD, North Dakota
WYCHE FOWLER, JR., Georgia
THOMAS A. DASCHLE, South Dakota
JOHN B. BREAUX, Louisiana

RICHARD G. LUGAR, Indiana
ROBERT DOLE, Kansas
JESSE HELMS, North Carolina
THAD COCHRAN, Mississippi
RUDY BOSCHWITZ, Minnesota
MITCH McCONNELL, Kentucky
CHRISTOPHER S. "KIT" BOND, Missouri
PETE WILSON, California
DAVID K. KARNES, Nebraska

CHARLES RIEMENSCHNEIDER, *Staff Director*
JAMES M. CUBIE, *Chief Counsel*
CHRISTINE SARCONE, *Chief Clerk*
CHARLES CONNER, *Staff Director for the Minority*

SUBCOMMITTEE ON CONSERVATION AND FORESTRY

WYCHE FOWLER, JR., Georgia, *Chairman*

HOWELL HEFLIN, Alabama
CHRISTOPHER S. "KIT" BOND, Missouri

CONTENTS

STATEMENTS

	Page
Baucus, Hon. Max, U.S. Senator from Montana	9
Dunlop, George, Assistant Secretary, Special Services, Department of Agriculture, accompanied by F. Dale Robertson, Chief, Forest Service, and Allan J. West, Deputy Chief, State and Private Forestry, Forest Service	32
Fowler, Hon. Wyche, Jr., U.S. Senator from Georgia	19
Hodel, Hon. Donald Paul, Secretary, Department of the Interior, accompanied by William Penn Mott, Jr., Director, National Park Service; and Walter Dabney, Chief Ranger, National Park Service	21
McClure, Hon. James A., U.S. Senator from Idaho	3
Melcher, Hon. John, U.S. Senator from Montana	1
Simpson, Hon. Alan K., U.S. Senator from Wyoming	12
Wallop, Hon. Malcolm, U.S. Senator from Wyoming	5

APPENDIXES

Appendix I

Responses to additional questions 83

Appendix II

Additional material submitted for the record 106

CURRENT FIRE MANAGEMENT POLICIES

THURSDAY, SEPTEMBER 29, 1988

U.S. SENATE, SUBCOMMITTEE ON PUBLIC LANDS, NATIONAL PARKS AND FORESTS, COMMITTEE ON ENERGY AND NATURAL RESOURCES, AND THE SUBCOMMITTEE ON CONSERVATION AND FORESTRY, COMMITTEE ON AGRICULTURE, NUTRITION, AND FORESTRY,

Washington, DC.

The subcommittees met, pursuant to notice, at 2:05 p.m., in room SD-366, Dirksen Senate Office Building, Hon. John Melcher presiding.

OPENING STATEMENT OF HON. JOHN MELCHER, U.S. SENATOR FROM MONTANA

Senator MELCHER. This is a joint meeting of the Subcommittee on Public Lands, National Parks and Forests, Committee on Energy and Natural Resources, and the Subcommittee on Conservation and Forestry, Committee on Agriculture, Nutrition and Forestry. In other words, two subcommittees, one from the Energy and Natural Resources Committee and one from the Committee on Agriculture, are involved in this hearing today.

Naturally, because the jurisdiction for the National Parks and some of the forest matters, National Forest matters, comes before this committee, the Energy and Natural Resources Committee, and some of the jurisdiction on the National Forests falls to the Committee on Agriculture, Nutrition, and Forestry.

So this is a joint subcommittee hearing. I happen to be on both committees, and Senator McClure and Senator Wallop are here for this committee. I think we will hear from my colleague, Senator Baucus and the statement he would like to make, and from Senator Simpson and the statement he would like to make a little bit later on.

What I hope to receive from the testimony of the witnesses today is their assessment of what should be the changes in the natural burn policy within wilderness areas, either in National Parks or National Forest lands.

When there is no provision for removal of dead timber on the ground, the fuel buildup in forests naturally becomes dangerously excessive and particularly in lodgepole pine stands. Pine bark beetle infestations of lodgepole stands, whether in wilderness or non-wilderness, will result in huge amounts of dead trees and particularly dangerous fuel conditions which, in effect, is a disaster waiting for lightning to strike.

Then, if there is a lot of dead fuel, under dry conditions, the fire is very hot and spreads rapidly. Sadly, that happened both in Yellowstone National Park's numerous fires this summer and also to the north in the Beartooth-Absaroka Wilderness Area, and in the Scapegoat Wilderness canyon fire, and in the Flathead National Forest adjoining Glacier National Park with fires that extended into Glacier.

Those are not all the fires we had in Montana, and I certainly did not mention all the fires that were in Idaho, Wyoming, Oregon and other states. I am not trying to mention all of them. I am just mentioning those that were particularly bad in Montana.

The natural burn policy for the wilderness in National Parks has been used since the early 1970s, and at about the same time became the policy of the Forest Service in wilderness areas on National Forest lands.

Perhaps some of the impetus for relying on the natural burn policy is a result of the cutbacks in National Forest personnel in the early 1970s. When President Nixon required a 10 percent reduction in federal employees, it seemed to me that National Forest personnel for fire fighting and trail building were greatly reduced, taking more—it seemed to me—taking a lot more than the reduction of 10 percent. The Chief can speak to that himself.

I have also noted in at least the last two fire seasons that the Forest Service, in order to avoid liability for unemployment compensation, has avoided hiring fire fighters who might be eligible for unemployment compensation when laid off after the fire season and the fall work was completed.

That certainly does reduce the number of experienced fire fighters that are available. That raises the safety issue of most of the fire fighters hired turned out to be inexperienced, and I would like to hear about that specifically.

My purpose is not to shove all the blame for the natural burn policy on federal officials and absolve Congress. We knew that the natural burn policy was being followed and we permitted it to happen, we be Congress. We permitted it. I am sure some of the inclination for the natural burn policy was to save money up front by not having to have as many fire fighters available and just let some of it burn naturally to remove the excessive dead fuel caused by dead trees laying on the ground.

With Congress knowing that that was going on and taking no action, we have to, in effect, share a portion of the blame for what has occurred this past summer.

I believe the points to resolve now are these: (1) revoke the natural burn as a policy; (2) use prescribed or controlled burns to get rid of excessive fuel—that is dead timber on the ground—as much as possible.

Third, thin lodgepole pine stands to minimize pine bark beetle infestation; (4) salvage, where possible, dead lodgepole. I am certainly talking not just about what is in wilderness. I am talking about what is in National Forest lands, or in parts of National Parks that are not considered to be wilderness management areas. We do not have to have too many more examples of where the fires start in either National Forest lands that is nonwilderness, or in parts of the National Parks that are not being managed as wilder-

ness but have big stands of lodgepole pine with a lot of it laying on the ground. We do not have to have too many more examples of that to prove the wisdom of doing something about those lodgepole stands when they need something done. After all, there is nothing wrong with wise, prudent management of these lands. There is nothing wrong with that.

It is the mandate, and to the extent that it has not been practiced does not mean we should not start doing it now as best we can. I know there is a lot of money involved, and I am going to get to that later.

The fifth thing I would like to have commented on is the cooperative study involving both the National Parks and the Forest Service with the National Academy of Sciences for the criteria that needs to be followed for enlightened prescribed burn management.

I am not sure that everybody is going to agree to do this, but assuming that it might be everybody agrees to do it, I have already unloaded on Dr. Press in a brief conversation earlier this week, "How would you like to do this? How would you like to be part of it?" The answer was affirmative, as it better be, from the National Academy of Sciences if we ask them to do it.

The sixth point, which I hope is clarified today, is how much extra money is needed for better fire management. Those are the points I would like to see.

Senator McClure.

STATEMENT OF HON. JAMES A. McCLURE, U.S. SENATOR FROM IDAHO

Senator McCLURE. Thank you very much, Mr. Chairman, for the opportunity to be here and the opportunity to bring forward these witnesses today and get a discussion of what policy is, what happened under that policy, and what that can tell us about what policy should be.

I want to thank each of the witnesses for appearing today and I look forward to the testimony. I think it will be enlightening.

To say that the issue over fire suppression policy has become a hot potatoe would be a gross understatement. I know that you are as concerned as we are in making certain that the record is clear for both the Congress and the American people about the causes, both natural and man made, of the devastation of a significant part of Yellowstone National Park this summer and the national focus has been what happened in the park, but the policy has consequences in more than just the National Park setting.

Fires such as were witnessed this summer in the Park are awesome, powerful, destructive, spectacular and dangerous all at the same time. What happened in Yellowstone provided citizens of this nation, perhaps for the first time, ringside seats to a spectacle that few outside the firefighting community ever get to see.

Again, I want to emphasize that while it was the Park that caused the focus on the problem, it is not just in National Parks that this policy becomes a question.

We are here this afternoon to discuss a policy that many are blaming for the situation, and I think we all agree that it is time to begin those discussions. I hope, Mr. Chairman, we can keep this in-

quiry focused where it really belongs—on the policy itself rather than on personalities and political questions.

The smoke from these fires may obscure our vision, but let us keep our memories unclouded. The policy that resulted in what we see today has been supported and used by both Republican and Democratic Administrations for the past 16 years. For 15 of those years it worked. This year it did not. It is time to take a look at why the policy failed us after 15 successful years.

There are several questions that I hope the witnesses will address in their testimony. I would like to know a little more about the procedure used by the Forest Service and Park Service in making a decision about whether or not a fire should be allowed to burn itself out. I understand that it is alleged that precipitation levels for the year were substantially above normal in the Park, but that just does not make sense to me since everyone knows this has been a dry year in the West.

If you are going to present me with precipitation tables, I am going to ask you some questions about those facts if, indeed, that is what they are.

I hope we will get a re-cap of the chronology of the decision-making process to help us better understand why decisions were made at the times they were.

There is no question in my mind that we need to make some changes in the way current policy is applied. At the risk of joining a lot of others in the Monday morning quarterbacking squad on this issue, I would like to suggest that park managers and other officials responsible for making the decision to allow the fires to burn should have given greater consideration to the heavy fuel buildups and recent moisture levels when making those decisions.

I would like to be very clear for the record, my colleagues, the press and the public, when I say that I believe what happened this summer is almost certain to happen again. We have been warned by land managers for years that long term suppression of fires was going to lead to devastation.

The management policies we pursue in our national parks and wilderness areas ensure that wildfires in those areas will not lack the fuel needed for a roaring start.

Most of what burned in Yellowstone Park were overmature stands of lodgepole pine, much of it already killed by insects. In other words, it was just waiting to be torched. Anyone who knows trees knows that lodgepole is nature's cover crop. It regenerates rapidly after a fire and helps bind the soil, prevent erosion, and provide shading. But lodgepole is relatively short lived. It is mature at 75 to 100 years of age and then it begins to weaken and deteriorate.

So, where we find these types of stands insect-devoured deadwood, we are looking at the result of either a fire suppression policy or a lack of natural fire occurrence or a combination of the two.

Lodgepole pine stands in Yellowstone National Park were attacked by mountain pine beetles in the late 1960's or early 1970's and within a few years, the attack reached epidemic proportions.

Despite pleas from forest managers to do something about the problem, politicians and conservationists were content to view the

problem as part of the naturalness of the Park. As a result, we allowed those tiny, pin-head sized bugs to eat their way through over two billion board feet lodgepole on National Forests and State and private lands surrounding the Park. Some of us were watching, others simply forgot or ignored what was happening.

Inside the Park itself, the situation that we faced this summer was developing ever so slowly. Despite the use of state-of-the-art forecasting capability, fire experts—and that is what they are—were backhanded by Mother Nature. One mistake in professional judgment, no matter how small, was turned into total devastation.

At that point, those of you that have experienced fiery holocausts first-hand, upclose, on the fireline, know that there is nothing you can do but hope that the forces of nature will eventually allow you a break. There is no power known to man that provides a means to distinguish fires like those experienced throughout the West, not just in Yellowstone, this summer.

There are millions of acres of forest on the public lands just like those that burned that survived this summer's holocaust. Many are in wilderness and roadless areas where there is virtually no access for fire fighting except by smokejumpers or by walking for miles. These are places where timber killed by insect and disease cannot be harvested. These are the same places where heavy fuel from dead and dying trees are measured by the tons per acre. Those are areas that are going to burn too. Maybe not this summer or next, but they will burn.

I hope the devastation we have witnessed this summer will open our eyes to the need for better access and management of our public forests. In some ways, the Congress is just as much to blame for what happened as anyone else. If we are going to start casting stones, and I hope we are not simply doing that, we at least ought to examine our own glass houses first. Thank you very much, Mr. Chairman.

Senator MELCHER. Thank you, Senator.

Senator Wallop.

STATEMENT OF HON. MALCOLM WALLOP, U.S. SENATOR FROM WYOMING

Senator WALLOP. Thank you, Mr. Chairman. I would like to thank in addition to you Senator Bumpers, Senator Fowler for holding joint hearings on the current policies. Too often turf is so protected that policies go unconfronted, unmatched and unstudied.

I think this is an important issue because it does contain elements of judgment of both the Forest Service and Park Service and, as others have said, the Congress. I appreciate the promptness that resulted in responding to our call for a review of these fire policies and their subsequent implementation, in and around the greater Yellowstone area in particular, but in the National Park system and the National Forest system in general.

Today's hearing marks only the beginning until the fires are completely extinguished and safety is returned to the Yellowstone area. There are many questions which cannot yet be answered. Recovery and rehabilitation efforts must be addressed more thorough-

ly later, either through the hearing process and interagency task force, or research projects.

As a ranking member on the Subcommittee on Public Lands, National Parks and Forests, I feel very strongly that in addition to insuring against fire reoccurrence of such magnitude, we must now make every effort to facilitate the healing process in Yellowstone.

Mr. Chairman, while we are here and we look at that map I might suggest that is both worse than imaginable and probably better than most people think inside those lines. Worse than imaginable because I do not know anybody sitting here at the beginning of the summer who would have thought we would be looking at a map containing fire boundaries of that dimension. Better than most people think due to the fact that despite certain areas of roads and other things in Yellowstone National Park which have miles and miles of devastation on either side of them, there is in that a mosaic; there is in that a lot of timber still standing. There are places covered and remaining dense habitat for wildlife species for which Yellowstone Park is so justly famous. There is in that still the Great Geyser Basin. There is in that still the lake and the Haden Valley. There are still the wonderful river systems and all the other natural features and attributes of Yellowstone Park.

While we look at that we should not assume that everything orange on there is black out there, because there is certainly a wonderful park for people to visit.

I think today's issue is, simply put, what went wrong? The fire policy appears reasonable on its face. I would point out as one reads it, it implies that the natural fire policy, the natural burn policy, is something that is done in accordance with the plan that exists somewhere on paper. It talks about fire in prescribed areas burning in places according to a fire plan.

It would not seem as though it were just a casual concept as if it is started by God, let it burn. If it is started by men, we put it out. It seems like there is a more conscious level of decisionmaking that goes on in that. Yet, I feel after having visited both Forests, that in large measure it had degenerated into such a simplistic answer that if it is naturally started, it continues, regardless almost of where it is except when threatening life or the buildings and historic artifacts of these places.

It seems and sounded at the beginning of the summer, as though in a suspension of judgment, we decided that man was not part of the ecosystem, that we had no means in our reach to make judgments.

When things went outside policies, and I have to tell you that it was not beyond comprehension of land managers that when Teeton County began asking for drought disaster assistance, however moist the spring may have been people may have recognized by then it was no longer the same situation on the ground. The judgment should have come into play, and a good deal earlier.

If you say is it the policy that failed or the implementation of the policy, I think that is part and parcel what we are going to learn here. I think the policy could be perhaps better written.

I have to say from this senator's perspective, any policy which does not admit that the person on the ground who was the responsible land manager can make judgments outside that policy, given

the change in circumstances in the year, will not make any difference. We will have the same thing occur. If it has to come from Washington, it is going to be a policy that will not work.

I do not mean to single out the Forest Service here but I do have a letter that came to me on the 20th of September from the Forest Service with this rather bullish appraisal of God's intention. It says, "The fire season in Wyoming will shortly be over, and based on past occurrences we do not anticipate another severely dry summer next year."

Well, how the hell does anybody know that? And on what basis can you make such an assumption? And if policy is made on assumptions like that, it doesn't matter how we articulate them here. They are not going to work.

If I sat down on the first of January every year on my ranch and said this is the policy that is going to run us for this year, and irrigation water did not come on, and cattle grazed too much and I still kept on with the policy, I would not have a crop and I would not have a ranch worth a damn at the end of that year.

Things do change during the course of the year and the land manager on the ground, the Park superintendent, the Forest supervisor, others are going to have to be able to respond to the circumstance month by month, week by week that confront them.

While I say our purpose here is to examine the policy and what changes might need to take place, unless we accept the premise that people out there are not only bound to but in a better position to make judgments as to the application of that policy. And if they have to get permission from Washington to change it, it really does not matter whether we write a new statute or they write a new policy, it is going to be the same consequence right on through.

Let me outline a couple of first hand observations. On the 22nd of July I toured the Mink Creek Wilderness fire by air. I called both the Secretary of Interior, Don Hodel, and Secretary of Agriculture, Richard Lyng, recommending that the Forest Service, National Park Service review both the wildfire policy, and for this year the light hand on the land policies and adopt a more aggressive approach.

At that time, with less than 50,000 acres burning, Secretary Hodel accepted my offer to visit the area and both cabinet officials agreed to a change, to a more aggressive approach.

Some weeks later I received a letter from the Forest Service Chief, Dale Robertson, stating that current burning conditions, fire activity, and predicted fire danger generate the need to insure that all necessary actions are taken to aggressively control all new starts in the area.

I must say when I toured the Mink Creek Farm I was asking about why we were, at that time and in that year, so tentative in our approach to the fight of it. I asked why we could not have chain saws and was instructed that there were chain saws up there but they were not allowed to be used.

I cannot imagine a more burdensome firefighting task than to carry a chain saw around that I could not use. Somehow or another it is important that we take into account the circumstances that are there.

Ironically, about the same time I received a letter from Director Mott who told me that the total perimeter acreage of the fire was over 20,000 acres, and that all Yellowstone area fires were under control. That was on the 11th of August.

To add to my frustration Don Dispane, the Park Service's senior biologist who helped write that natural fire policy, was quoted as late as August 28th that this was the first time he had been able to see one of his plots burn. Having his picture on the front of the Denver Post saying, "Burn, baby, burn," did not add to the mood of the people of Wyoming who so treasure that park. The same biologist said days later that it would take at least 300 years to return the burned area to normal.

As I said earlier, reading the policies of both the Park and the Forest Service, one can find little in the stated language to disagree with. They seem to give managers of public lands adequate flexibility to respond.

In addition, it appears that they allow for an active fire prevention program to prevent the hazardous fuels. In fact, Director Mott, I think on the 7th of July in 1987 in an interview with the New York Times, said that we should do more of that as the Indians once did. That the parks were too small in their dimension to be totally turned over to natural processes, and that we had to make some judgments as to the management of them to try to keep as much natural forces at work and at play.

So I just conclude by saying the Yellowstone area belongs to all Americans, but the people of Wyoming and I suspect those of Montana who spent the summer with their vistas shrouded by smoke, with their health in many instances threatened, with sore throats and running eyes and other things did not find this once in 400 year event something to celebrate. They found it, in fact, something really terribly troubling, and they did not get information that either persuaded them that an effort of consequence was being made to control those fires; even at a time when such an effort was underway. And they got conflicting details all the time as to what, in fact, was going on.

We have, for example, heard the Park Service and the Wyoming Fish and Game Service saying in essence we have not lost much in the way of big game. Last week we have seen how the grizzlies were now chowing down on charred carcasses. I guess my point in all of this is to say that information ought to be consistent. It ought to be forthright, and it ought not to be information from biologists and park superintendents and forest supervisors. It ought to be a consistent level that is informative to the people around.

We suffered in Wyoming this year. We suffered economically. We suffered physically. Some people had serious health problems. More importantly, we suffered emotionally. Wyoming takes pride in the fact that it is the world's first National Park, that most of it is in Wyoming. It has been cared for and nurtured and exploited. Indeed, it is part and parcel of the economic life of our state. But it was the care for it that was hurting people emotionally so badly, and the inconsistent information that was coming out all during that time is what created the rage that is still omnipresent. People resent it in its entirety.

Our job now is to find out what we can do. This hearing will help and subsequent ones will as well. Our job now is to talk about the reforestation and the recuperation of those lands, and our job now is to begin to tell people that it is not a Mt. Saint Helens-type of event to visit, but it is still one of the world's rare and special places, and that it has not been so damaged by these events that it is not worth going to. It plainly and purely is.

The last thing I would like to do is to make certain that everybody who may hear these words and the words of this know that all of us here are amazed by the courage, by the dedication, by the endless hours, by the astonishing efforts that were put in by the firefighters. Tales of heroism, Chief Ranger of the Park, Ben Shully jumping out of a helicopter to save an outfitters camp; people at Grant Village standing on the roof getting slurry bombed and still trying to save things; rangers doing extraordinary things, the forest rangers doing extraordinary things.

Our grief is not with the courage and efforts that were put in. Thank you.

Senator MELCHER. Thank you, Malcolm. I think the point you make about the information being available and just what the situation is is one we cannot forget as we move forward in the next year. I would like to hear from the Park Service people what steps that can be taken to inform people that Yellowstone is a great place to come to, still, this winter and next summer, and by all means encourage people to keep it in their plans.

The Park is open now, people are enjoying it, not just to see how much was burned, but enjoying the opportunity to see wildlife probably better than ever before. There is nothing wrong with the lake, nothing wrong with the falls, nothing wrong with the geysers. I think people deserve to know that. Yellowstone is not someplace that is going to be set aside for years to come when it will not be that much fun to visit. It is still that much fun to visit.

As far as the wildlife is concerned, they are hardy and you can certainly see them easier than you could before, unfortunately. I think it is important that the public know that this is a good place to visit and we can hope to see an effort made by the Park Service to make that information available so people in business around Yellowstone can depend upon the same level of business that they have had in the past. That is very significant economically to them.

I want to announce that the hearing record will remain open for two weeks for additional testimony. First of all I would like to hear from my Montana colleague, Senator Max Baucus.

STATEMENT OF HON. MAX BAUCUS, U.S. SENATOR FROM MONTANA

Senator BAUCUS. Thank you very much, Mr. Chairman. I, first, want to commend you for holding this hearing. Now that the forest fires of the summer have calmed, it is a time I think to turn a cool eye on what really happened and whether the federal policy that was in place made a bad problem worse.

First I would like to briefly talk about a hearing I chaired just last Saturday in Bozeman, Montana on the economic impact of the fires. Governor Ted Schwinden and Yellowstone Park Superintend-

ent Bob Barbee testified, as did businessmen, outfitters, government officials, and representatives of the Small Business Administration and the Farmers Home Administration.

While we will not know the full economic impact of the fires until the end of the next several tourist seasons, initial reports of financial losses are quite high.

Hamilton Stores, the main concessionaire in Yellowstone Park, lost $3.5 million in sales. Their stores combined lost 178 business days.

Resort taxes for the town of West Yellowstone are down 24 percent this August compared to last year.

Surveys conducted in Livingston, Gardiner and Cooke City show that over half the businesses suffered a 30 percent or greater drop in volume. All the establishments polled were enjoying a banner year until the fires hit.

Further north around Augusta, Montana, landowners estimate damages at nearly $5 million. That figure includes lost cattle, hay, timber, as well as burned summer homes, fences, and barns.

I have already introduced legislation to establish a five member commission to determine which fires were natural burn fires, and then decide if substantial economic or physical injury was caused by the fires.

If that decision is made, businesses and people who have been injured will receive direct government grants to help compensate for their loss. Even in the short time remaining in this session, Mr. Chairman, I urge all of us to quickly pass this much needed legislation.

However, the greatest loss from these fires has no price tag, and that is the image of Yellowstone, Montana, Wyoming, Idaho as a premier destination for a family vacation.

The global press coverage of the fires at Yellowstone has had a profound effect on tourism. Sure, there will be those who are interested in the natural wonder of a forest fire. But many Americans think Yellowstone is ruined. As you said, Mr. Chairman, that just is not so.

Governor Ted Schwinden of Montana, Governor Mike Sullivan of Wyoming are dedicating significant state revenues to promote the "New Yellowstone" a constructive ongoing story of growth and renewal. They have asked for additional federal resources to help promote the Park. I believe that Congress should support these efforts strongly because Yellowstone is much more than a national park—it is a national treasure.

I do not think anyone in this room can question the strong emotions evoked by the scenes of Yellowstone ablaze. As one young Montana writer said, for him, Yellowstone is a "home . . . a place of dreams," the "playground" is his youth. It is, as he said, a place where you can find "a miracle every ten feet."

All Americans—indeed, with the advent of modern satellite technology—people around the world were moved by the heroic efforts of the many fire fighters who fought the blazes in Wyoming, in Yellowstone and around. As you said, Senator Wallop, heroism was truly outstanding. I know, for example, many instances of great sacrifices. One minor one is an incident commander did not get married on his scheduled wedding date, and there are other similar

examples of the events that people on the scene had postponed or did not take advantage of because they stayed and worked very hard on the fire.

Senator WALLOP. Max, if you would, I suspect that the same was true of Montana as for Wyoming. There were a lot of local fire districts who sent fire trucks and fire fighters there, county fire departments and other things.

Senator BAUCUS. In fact, I hear fire trucks came as far as the East Coast to Yellowstone.

Mr. Chairman, fires in Yellowstone and western Montana are not just a disaster, they are a symptom of long neglect of our public lands by this Administration. In the wake of what has happened, we are hearing the cries for someone's head.

Well, let us make it clear that the responsibility lies not with the hard working men and women in the Park Service or the Forest Service—people who have dedicated their lives to caring for our public lands. The responsibility rather lies directly at the door of top policy makers, wherever they may be in the Administration, and as you said, Senator McClure, to a significant degree also with the Congress.

I do not claim to be a scientific expert, so I cannot judge the ecological benefits or harm of the natural burn policy. It seems to me that the conditions we experienced this year, record drought, record temperatures and high winds, were obvious to everyone. With the benefit of 20/20 hindsight, the natural burn policy will change because of what has happened in Yellowstone and elsewhere.

I personally agree with an aggressive program of prescribed burn. Not in July and August, but rather in the fall of the year after the first snow, or in the spring of the year is the time of the year that makes sense. As we all know, lodgepole pines is a peculiar species. It has to be thinned, and it seems to me that it makes much more sense in the resolution of the conflict between nature and man to have a prescribed burn policy that directs the burns at a time of the year that makes more sense than summer.

We must treat the land in a way that protects its long-term health. After all, an unhealthy forest will ever be a home for a healthy wildlife population or a healthy economy.

Mr. Chairman, I commend you for this hearing. As you have all said, the important point is not to call for the heads of people, to be partisan, to be political, or rhetorical, but rather to get to the bottom of the matter here and see if there is a way to help us constructively reshape the prescribed burn policy in a way that makes more sense. Thank you.

Senator WALLOP. I would like to make an observation. I suppose they have not been political. I wish they had not been.

In all honesty, this policy was ardently subscribed to, defined and pushed by Secretary Andrus. The groups that have been attacking me, National Parks and Conservation Association, Sierra Club, Wilderness Society, National Audubon Society, Representative Bruce Bentoe, National Wildlife Federation are all east and out of the picture of the immediate environments of your states and mine, and they are the ones who subscribe to this policy.

So if we do not want to make it political, leave us not.

Senator BAUCUS. The point I was trying to make is that, first, there are various definitions of prescribed burn, and it is what one means by prescribed burn.

Second, whether the policy is implemented during this administration or an earlier date to me is irrelevant. The main point is let us just try to make this the better application of prescribed.

Senator WALLOP. I agree.

Senator MELCHER. Thank you very much.

Senator Simpson.

STATEMENT OF HON. ALAN K. SIMPSON, U.S. SENATOR FROM WYOMING

Senator SIMPSON. Thank you, Mr. Chairman. I think perhaps my remarks would be a bit repetitive of what has gone on. I thank you for holding these hearings and for listening to the complaint of westerners, people who represent people who feel seriously pained and aggrieved by the situation.

I have been in politics, public life, for about 24 years, and I have never had such an extraordinary response of irritation, hostility, pain and anguish poured out than I have experienced with this. It is even worse than bank withholding if you can imagine that, and we remember that one. I think I got 33,000 pieces of mail on that one. From a small state, that is pretty interesting material.

This one is different, though. People talk about it with some reverence. They say, you know, my grandfather took me to this lake when I was a kid, and I took my child there. Now there are 8 inches of ash there. You cannot describe that to anybody in any political terms or Democratic or Republican terms. That is the difference here.

So I guess I would emphasize that this raging fire and the conditions that contributed to it, and we hear these descriptions and nomenclature like fuel load and things like that. People do not quite know what that is, but they sure do know that the southwest winds were blowing in Wyoming in May and June and that it was plain hot in the daytime, and that the most extraordinary signal was ignored. I think my friend Malcolm spoke of that. That is Teton County asking for drought assistance and hay assistance in June.

What were they thinking of when they watched this county, Teton County, under the fine leadership of three very interesting commissioners, Democrat and Republican alike, saying watch out, this is bad business?

Somewhere along the line the order went down to suppress the fires. I guess you will find out exactly when that happened. There seems to be a bit of a difference as to at least when it was given and as to when it was picked up.

In any event, if that order was not carried out, then what I have said always, it is just like the Army. If you do not carry out the orders, you lop off a head. I have said that. It was that way in the Army and it still works, I think, in the bureaucracy; except there is a point in the bureaucracy where it does not work, where they just kind of giggle and say, well, they tried but they failed.

I do not know where that happens and at what level, but there were some interesting things that occurred down in the field that were certainly different than the order from the top.

I would just ask that the balance of my remarks be placed in the record as if read in full and just say that I think we want to review, and I know you will, the issue of this passive management which they have allowed to take place there.

I will not go into the terrible anguish of people whose health was affected. It is ironic when we tell people not to have wood stoves in certain areas in Wyoming and then you could not even see to your fenceline for days on end and pretend that that was something appropriate.

The economic dislocation, the outfitters who are terribly hurt, wiped out, bankrupt; that is what happened to them, many of them.

So it is not really to look at administrations, but we can go back to one thing, I think, and I hope and recommend this respectfully to the committee, that we take a look at the Leopold Report. The Leopold Report came about during the days of Johnson and Kennedy. We are not blaming administrations, but that was the origin of it. That is what allowed some of these policies to take place in this passive way and to disregard a tool which was never used or seldom used called prescribed burning.

It would have had enhancement of grizzly habitat. I get a lot of flack about my position on grizzly habitat, but I have always said just show me what it does and give me some idea and I will listen. I have said that publicly.

In any event, I urged that prescribed burning five years ago, my records show. It would have turned the park into a true mosaic of trees with different ages, and now we will have a park consisting of at least a million acres of trees all the same age. So you are right back in the same box, and we have another terrible fire because of this lack of prescribed burning.

So I think the "let it burn 'policy has been a disaster in this year. I cannot argue with it in spring and fall of other years when it only consumed 6,000 acres in a whole period of maybe 10 years.

I hope that the Chairman and the committee will look at the Leopold Report, which stated that Yellowstone should be managed in a "natural 'manner; that Yellowstone should be "an illusion of primitive America'. I think that report is responsible for other problems in the park, including problems with grizzly bears, wolf reintroduction, and restrictions on public access.

I hope you will zero in on it as the genesis of park mismanagement from its inception and conduct a review of it on current park policy. I hope your hearing will reevaluate those policies.

Mr. Chairman, I close and say what we need in the park is active stewardship to prevent another disaster in the future. It is not a time for some collection of whimsical and dewy-eyed assertions about what it should be. When you have a park that was put up in the Organic Act of 1872 for the enjoyment as the pleasuring ground for the American public, that is what it is for. That is what it says in the Organic Act.

So I think it is time to quit playing God in Yellowstone and start playing active, reasonable, sensible land management called stew-

ardship. It is time to formulate that policy with an emphasis on live, hands-on stewardship and not some flight of biological and scientific fancy.

I thank the Chairman.

[The prepared statements of Senator Simpson and Senator Fowler follow:]

STATEMENT OF SENATOR ALAN K. SIMPSON
BEFORE THE JOINT HEARING OF THE SENATE COMMITTEES ON
ENERGY & NATURAL RESOURCES AND
AGRICULTURE, NUTRITION & FORESTRY
SEPTEMBER 29, 1988

o MR. CHAIRMAN, I COMMEND YOU FOR HOLDING THIS HEARING TODAY. THE RAGING FIRE THAT BURNED THIS SUMMER IN YELLOWSTONE NATIONAL PARK AND THE NEIGHBORING NATIONAL FORESTS IS ONE OF THE MOST DEVASTATING DISASTERS THAT HAS OCCURRED IN THE WESTERN UNITED STATES. THE CONDITIONS INSIDE THE PARK AND FORESTS THAT HELPED TO CONTRIBUTE TO THE SIZE AND RANGE OF THE FIRES WERE READILY APPARENT TO ALL OF US IN WYOMING. IT WAS AN EXTRAORDINARILY DRY YEAR. AND THE PARK AND FOREST SERVICE LET THE "FUEL LOAD." THAT MEANS THERE ARE LOGS ALL OVER THE GROUND. THEY ARE DRY AND THEY BURN. THE FUEL LOAD WAS BUILDING TO A POINT WHERE IT WAS LIKE HAVING AN ANCIENT ATTIC FILLED WITH OLD CRUMPLED NEWSPAPERS WAITING FOR A SPARK TO IGNITE THE WHOLE PILE.

o INTERESTINGLY ENOUGH, IN TETON COUNTY, WYOMING -- WHICH BORDERS BOTH THE PARK AND THE FOREST -- THE VERY RESPONSIBLE COUNTY COMMISSIONERS REQUESTED ASSISTANCE IN JUNE INDICATING THE DROUGHT CONDITIONS OF THE RAREST FORM. THE REQUEST INCLUDED ASSISTANCE FOR HAY, THE HARVESTING OF HAY AND

DROUGHT RELIEF ASSISTANCE. YET, APPARENTLY, THE AGENCY PEOPLE WERE NOT HEEDING THAT EITHER.

o EVEN THOUGH THE FOREST AND THE PARK AUTHORITIES KNEW THAT THE AREA WAS AN ABSOLUTE TINDER BOX, THEY CONTINUED WITH THE "LET BURN" POLICY, WHICH INITIALLY ALLOWED FIRES TO BURN UNCONTROLLED. IT IS THAT "PASSIVE" MANAGEMENT WHICH LED US TO THE DISASTROUS SITUATION TODAY.

o ONE RESULT IS AIR POLLUTION PRODUCED IN THE FORM OF CARCINOGENS AND PARTICULATE MATTER THAT HAS AFFECTED ASTHMATICS AND CAUSED HEALTHY INDIVIDUALS TO BREATHE CANCER-CAUSING CHEMICALS AND PARTICULATES THREATENING TO THE PUBLIC HEALTH.

o THEN, THE ECONOMIC DISLOCATION CAUSED BY THE FIRES HAS SEVERELY STRESSED BUSINESSES IN AND AROUND YELLOWSTONE PARK AND THE FORESTS TO THE POINT WHERE SOME WILL INDEED GO BANKRUPT AS A RESULT OF A VERY POOR TOURIST SEASON OR HUNTING SEASON.

o TODAY, WE ARE SEEING THE RESULT OF THE ERRONEOUS COLLECTION OF WHIMSICAL AND DEWY-EYED ASSUMPTIONS. THE LEOPOLD REPORT PROPOSED A FIRE MANAGEMENT POLICY WHICH BECAME A TICKING TIME BOMB. BY ALLOWING SMALL AREAS TO BURN WHEN LIGHTNING STRUCK, THE AGENCIES WERE SETTING THE FOREST UP FOR

A GIANT INFERNO BY ALLOWING THE OVERLY MATURE PINES, GREAT STANDS, TO ACCUMULATE DEADWOOD OVER A VAST AREA.

o THE PARK HAD A TOOL WHICH THEY NEVER USED, OR SELDOM USED, CALLED PRESCRIBED BURNING, IN ORDER TO BURN OUT OVERLY-MATURE STANDS OF PINE TREES AND TO CLEAR OUT DEADWOOD THAT CONTRIBUTED TO FUEL FOR LARGE, UNMANAGEABLE FOREST FIRES. BY USING THESE TECHNIQUES, THE PARK COULD HAVE ENHANCED THE GRIZZLY HABITAT AND AT THE SAME TIME, THE PRESCRIBED BURN COULD HAVE REDUCED THE FUEL LOADS IN ORDER TO PREVENT THE INFERNO RATE WE SAW THIS SUMMER. THEY HAVE HAD THIS METHOD AVAILABLE FOR 16 YEARS AND I HAVE URGED THEM TO USE IT FOR THE PAST FIVE YEARS. PRESCRIBED BURNING WOULD HAVE TURNED THE PARK INTO A TRUE MOSAIC OF TREES WITH DIFFERENT AGES. NOW WE WILL HAVE A PARK CONSISTING OF TREES ALL THE SAME AGE. WE COULD HAVE ANOTHER TERRIBLE FIRE IN 15 TO 20 YEARS BECAUSE OF THE LACK OF PRESCRIBED BURNING!

o THE "LET BURN" POLICY HAS BEEN A DISASTER AND WE OUGHT TO BE CONCENTRATING ON HOW THE POLICY CAME ABOUT, MORE THAN WE ARE CONCENTRATING ON INDIVIDUAL PARK OFFICIALS. THIS POLICY CAME ABOUT BECAUSE OF THE "LEOPOLD REPORT" WHICH STATED THAT YELLOWSTONE SHOULD BE MANAGED IN A "NATURAL" MANNER AND THAT YELLOWSTONE SHOULD BE "AN ILLUSION OF PRIMITIVE AMERICA." THE LEOPOLD REPORT IS RESPONSIBLE FOR OTHER PROBLEMS IN THE PARK, INCLUDING PROBLEMS WITH GRIZZLY BEARS, WOLF REINTRODUCTION AND RESTRICTIONS ON PUBLIC

ACCESS. WE NEED TO ZERO IN ON THE LEOPOLD REPORT AND THE GENESIS OF PARK MANAGEMENT IN OVERSIGHT HEARINGS. THE INTERIOR DEPARTMENT AND CONGRESS NEED TO CONDUCT A REVIEW OF THE LEOPOLD REPORT AND CURRENT PARK POLICY DEALING WITH OTHER ISSUES AS WELL.

o SO, THE MANAGEMENT OF YELLOWSTONE AND THE SURROUNDING NATIONAL FORESTS COULD HAVE BEEN AND SHOULD HAVE BEEN DIFFERENT. I TRUST, MR. CHAIRMAN, THAT TODAY'S HEARING WILL BE THE FIRST STEP IN RE-EVALUATING THOSE POLICIES SO THIS TYPE OF NATURAL DISASTER CAN BE AVOIDED IN THE FUTURE. I WILL BE VERY INTERESTED IN RECEIVING THE TESTIMONY OF THE WITNESSES.

o NOW, MR. CHAIRMAN, WE NEED ACTIVE STEWARDSHIP TO PREVENT ANOTHER DISASTER IN THE FUTURE. A PUBLIC POLICY REVIEW IS LONG OVERDUE. IT IS TIME WE QUIT PLAYING GOD AND START PLAYING ACTIVE, REASONABLE AND SENSIBLE LAND MANAGEMENT, CALLED STEWARDSHIP. IT IS TIME WE FORMULATED A POLICY WITH AN EMPHASIS ON ACTIVE STEWARDSHIP, LIVE HANDS-ON STEWARDSHIP, NOT SOME FLIGHT OF BIOLOGICAL AND SCIENTIFIC FANCY.

/DC

Forest Fire Policy Hearing
Senator Wyche Fowler, Jr.
September 29, 1988

I want to thank the witnesses and my colleagues on the committee for taking part today in this necessary review of the Forest Service's policies on controlling forest fires.

The "let-it-burn" policy adopted in recent years does have a basis in sound forest management. However, we would be remiss if we did not re-examine this policy and discuss more flexible guidelines after what we experienced this summer: millions of acres, an area the size of Connecticut, burning out of control in Yellowstone National Park, under unusual drought conditions, threatening towns and businesses and even closing down such a popular national icon as Old Faithful.

Forest fires are essential to the natural renewal of the ecosystem. Fires started by lightning and other natural causes have, for eons, played an important part in the continous cycle of thinning the forests and clearing away old growth to make room for the new, creating healthier woodlands and increased wildlife habitat. It is unlikely that we will ever be able to improve on nature's housekeeping.

At the same time, we have to take into account other important considerations that we do control. We have to recognize that we no

longer possess unlimited open spaces. That makes our remaining forests more fragile. Wildlife cannot so easily migrate to new territories until an area cleared by fire can regenerate. Huge fires, raging out of control as they did this summer, could threaten irreversible damage.

We have few areas left that are relatively undisturbed by human activity, fewer still of Yellowstone's incredible natural beauty.

This land has been set aside for our national stewardship, for the use and enjoyment of all our citizens. The tens of thousands of people who travel to this remote area every year bear witness that this is an extremely scarce and extremely valuable resource for our people -- too valuable to put at risk with management policies that may not be comprehensive enough.

We will only place greater reliance on national parks in the future as our population grows and our cities spread. Our remaining natural refuges will become ever more precious for generations to come. That is why we need to carefully weigh the management practices of the US Forest Service -- taking all these factors into consideration -- so that our national parks will continue to flourish.

Senator MELCHER. Thank you very much for your nice statement.

We are going to hear from the witnesses as if it were a panel. We will make a panel out of it:

Secretary Hodel, accompanied by Director of National Parks William Penn Mott and Walter Dabney, Chief Ranger of the National Park Service;

Assistant Secretary George Dunlop, Department of Agriculture, accompanied by Dale Robertson, Chief of the Forest Service, and Allan J. West, Deputy Chief for State and Private Forestry of the Forest Service.

We will hear first of all from you, Secretary Hodel.

STATEMENT OF HON. DONALD PAUL HODEL, SECRETARY, DEPARTMENT OF THE INTERIOR, ACCOMPANIED BY WILLIAM PENN MOTT, JR., DIRECTOR, NATIONAL PARK SERVICE; AND WALTER DABNEY, CHIEF RANGER, NATIONAL PARK SERVICE

Secretary HODEL. Thank you, Mr. Chairman. I have a prepared statement which, with your permission, I would like to place in the record.

Senator MELCHER. It will be made part of the record.

Secretary HODEL. As I am sure you are aware, ordinarily I do not spend much time on a prepared statement. I would like today, with your permission, to cover portions of it in some detail because I think it is an important foundation for what we will be saying here later.

I appreciate the opportunity for this hearing today to discuss the matter of fire management policies.

I should say that the fires are still going. We had a conversation this morning with Bob Barbee, who is the Superintendent of Yellowstone, about the current status. We are increasingly optimistic that if we do not get a bad turn in the weather we will be able to get these fires not only contained but ultimately controlled in the next several weeks.

It has been a tough summer, and we are acutely aware of how difficult it has been for people who live in that area, either because of the economic consequences to them of the fire or because of the health consequences. They have lived for 90 to 120 days in a pall of smoke which has hurt the eyes and pained the throat.

You have asked the background of how our policies are formulated and, specifically, how they were applied in Yellowstone. The National Park Service has provided me with that background.

For nearly 100 years, it was the general policy to suppress wild fires whenever possible or practical, especially after certain devastating fires occurred earlier in this century. This contributed to the fuel buildup that we have heard so much about this afternoon in many park and forest areas in the west.

Then in 1962, the Leopold Report was prepared. Leopold was a professor of wildlife management at the University of California. The report encouraged a less manipulative approach to natural park environments. It found that fires, erosion, floods, insect infestations and other natural forces are essential to perpetuate natural communities and that attempts to suppress these forces were impractical and ecologically unsound.

This is the report, of course, to which Senator Simpson referred just a few moments ago.

In March 1963, the Secretary of the Interior directed that the Leopold Report be implemented and incorporated into the philosophy of the administration of the National Park System. That became the basic foundation for the National Park Service's policies relating to this matter.

The implications for fire management were significant. By addressing the importance of fire in natural systems, the board recognized that fire is natural to many wild lands. Fire plays a vital role in the ecology of those lands, such as the management of vegetation.

There was research in the Everglades and the Sierras during the 1950's and 1960's that led them to a forerunner of this policy.

As a result, the present park policy and that of many other land-managing agencies evolved to be more understanding, more accepting of the natural role that fire can play in the environment of certain parks and wild areas. It is a policy that permits some fires to occur but also sets, or attempts to set, parameters for fire suppression.

The current policy of the National Park Service first appeared in 1968 and was subsequently reaffirmed in 1970, 1975 and again in the 1978 edition of the National Park Service management policies, all of which have been subject to extensive public review.

In addition, it is my understanding that the National Park Service also issued a wildland fire management guideline in 1978 known as NPS–18. This document spells out in great detail the policy of the Service and the role of each management unit in implementing that policy. It guides all employees in the conduct of approved fire management activities.

Based first upon the policy and secondly on the guideline, each park with vegetation capable of burning prepares its own fire management plan. As a result Yellowstone National Park began updating its own fire management plan originally developed in 1972 and updated in 1976. There was public review.

Mr. Chairman, the National Park Service fire management in Yellowstone has been described as a complete "let it burn" approach to natural fire. In reality, the park staff evaluates every fire that occurs. Some of these fires are suppressed immediately. Most of them in Yellowstone go out on their own, and some are monitored. A fire that has been allowed to burn initially may be reclassified as a wild fire anytime it becomes unacceptable, and suppression action is begun.

The primary criteria for decisions on prescribed natural or monitored fires would include threats to life and property, ability to keep the fire within the boundary of the park, and resources available to control the fire. If any of these change, then the fire becomes unacceptable, and the appropriate suppression strategy begins. Suppression activities begin immediately on fires caused by human activities such as, this year, the North Fork fire.

The fact that the fires in Yellowstone this year have been so intense and have behaved erratically has heightened confusion about what our actual policy is. Only some of the fires in Yellowstone this year arose naturally within the park. Many others did not.

Because of the unusual conditions this year, there have in fact been times where aggressive suppression action on a fire was taken from the beginning, and yet the fire became so dangerous that firefighting tactics had to be drastically changed. In some cases we were reduced to monitoring activities even with our strong push to actively suppress or confine these fires.

I think we all recognize, as has been said here several times this morning, that the men and women who have been on the fire lines deserve our credit. The over 9,000 firefighters at one point on the fire deserve our credit. They rallied countless times. They are outstanding men and women, and we owe them our sincere thanks.

We also need to be thankful, Mr. Chairman, that there was no loss of life and, although some property was lost, in fact, compared to the areas exposed by these fires to risk, it was relatively far less than we might have anticipated had it not been for the tremendous effort of the firefighters.

I visited Yellowstone twice this summer, Mr. Chairman, once on July 27 and again on September 10. By the time I arrived in the park the first time, the National Park Service had in fact already made the decision to take suppression action on all the fires in the park. That was not generally reported or understood, so that it appeared that my visit there had the effect of precipitating a change in the policy.

I think that there is some misunderstanding as to what actually transpired, but I am assured that that policy had been changed prior to my arrival and that what I attempted to do while there was draw attention to the fact that as of that time all fires were deemed to be wild fires and, therefore, would be subject to suppression action.

The fact of the matter is that, following that, we had several bad wind storms. The fires got severely out of control, and again in September when I visited a much larger area had been subject to fire attack.

Secretary Lyng and I have formed a professional review team with broad experience to objectively evaluate current fire policy to try to accommodate the kinds of conditions that we have seen this year. The team is requested to make their report to Secretary Lyng and me by December 15.

After we have reviewed that and have, hopefully, approved their recommendations, that proposed revised policy will be issued for public comment.

Moreover, Mr. Chairman, as we look at these maps we need to recognize that where we define the perimeter of a fire, it does not in fact represent the total area burned. We have brought with us a number of photographs which I would, with your permission, like to present to the committee to review.

These photographs will show quite clearly, Mr. Chairman, that we have numerous different conditions on the ground where the area has been touched by fire. In some places where the fire crowned and it was intensely hot, the trees are totally burned and gone, and you will have an open ash-covered area. In many other areas, the trees will appear to be darkened or scorched.

Then in many more areas they will remain green, and it is anticipated that a significant share of those trees will survive the fire.

This is what has been referred to as a mosaic. In fact, we are encouraged by the reports that we have been getting from the field as the fires have been brought under control that the damage has not been as severe as might have been anticipated.

At this time also, Mr. Chairman, the National Park Service assures me that they are considering the kinds of actions that they may be able to take which will provide for restoration and rehabilitation; if you will, the rebirth of Yellowstone.

I should point out that normally following a fire in a national park there would not be an extensive or significant effort toward rehabilitation on the grounds that the natural processes should be allowed to operate.

Here, because of the extent of these fires, the impact on the visual effects in certain areas, and the concern for river siltation and erosion, the National Park Service is considering and will be attempting to implement, where they feel it is appropriate and where they have the ability to do it, some kind of rehabilitation activity which will more rapidly regenerate ground cover in those areas.

With me, as you have indicated, are the Director of the National Park Service, Mr. Mott, and the Chief Ranger of the National Park Service.

I think we would all join together, Mr. Chairman, with the members of this committee and those who have spoken before us in urging that people not reach the wrong conclusion about Yellowstone National Park. It still is very much there. The natural features, the geyser basins, the lake, the wildlife are still very much there and very much worthy of viewing.

There will also be vistas which were not there before. They will be of concern but will also be subject, as you have suggested, Mr. Chairman, to interpretation by the National Park Service so that visitors can come and see the devastating effects of the fires of 1988. In the end, I think people will be surprised, as Senator Wallop may have indicated earlier.

In light of the tremendous coverage that has been given and the pictures that we have seen of really total devastation of a forest area, we need to remember that fully one-half of the park has not been touched, and fully one-half of the area that has been touched by fire will very shortly not appear to have been. There will still be very large acreage, Mr. Chairman, which will obviously bear the effect of fire for many years to come.

With that, we would be very happy to hear the rest of the panel and try to respond to your questions.

[The prepared statement of Secretary Hodel follows:]

STATEMENT OF DONALD PAUL HODEL, SECRETARY OF THE INTERIOR, BEFORE THE SUBCOMMITTEE ON PUBLIC LANDS, NATIONAL PARKS AND FORESTS OF THE SENATE COMMITTEE ON ENERGY AND NATURAL RESOURCES, AND THE SUBCOMMITTEE ON CONSERVATION AND FORESTRY OF THE SENATE COMMITTEE ON AGRICULTURE, NUTRITION AND FORESTRY, REGARDING FIRE MANAGEMENT POLICIES ON LANDS ADMINISTERED BY THE NATIONAL PARK SERVICE.

September 29, 1988

Mr. Chairman, it is a pleasure to be here today before these two subcommittees to discuss the fire management policies of the Department of the Interior, particularly on lands administered by the National Park Service.

I wish that I could report to you that the fires which plagued our western United States this summer are history. For some of our citizens, this may be true, but for many others, the fire danger persists even as we speak. The scale of these fires, Mr. Chairman, has not been seen in our lifetime. The fires have damaged and destroyed public and private property, displaced park and forest neighbors, and inconvenienced the traveling public. The story was on the front pages of our newspapers and filled our television screens. While I am somewhat encouraged by the news from Yellowstone, the fact is that the western fire season is not over.

You have asked us about how our policies are formulated, and specifically how they were applied to Yellowstone. The National Park Service has outlined the background of these policies for me. Let me therefore review briefly for the Committees the

process that they that they went through in developing their wildland fire management policy.

For nearly 100 years, it was the general policy to suppress wild fires whenever possible or practical, especially after certain devastating fires occurred earlier in this century. This contributed to a fuel buildup in many park and forest areas in the West. In 1962, Secretary of the Interior Stewart Udall appointed an Advisory Board on Wildlife Management in National Parks, chaired by A. Starker Leopold, a professor of wildlife management at the University of California. A report was produced that encouraged a less manipulative approach to natural park environments. It found that fires, erosion, floods, insect infestations and other natural forces are essential to perpetuate natural communities, and that attempts to suppress these forces were impractical and ecologically unsound.

In March 1963, the Secretary accepted the report of the Board and in a memorandum to the Director of the National Park Service instructed that, "You should ... take such steps as appropriate to incorporate the philosophy and the basic findings into the administration of the National Park System." This became the foundation upon which the Service's administrative policies were completely overhauled.

The implications for fire management were significant. By addressing the importance of fire in natural systems, the board

recognized that fire is natural to many wild lands and plays a vital role in the ecology of those lands, such as the management of vegetation. The National Park Service also tells me that research in both the Everglades and the Sierras during the 1950's and 1960's led them to permit prescribed fire on a case-by-case basis. As a result, their present policy, and that of many of the other land managing agencies as well, evolved to be more understanding of the natural role that fire can play in the environment of certain parks and wild areas. It is a policy that permits some fire to occur, but also sets parameters for fire suppression, which I will explain in more detail in a moment.

The current policy of the National Park Service first appeared in 1968 and was subsequently reaffirmed in the 1970, 1975, and 1978 editions of the NPS Management Policies, all of which have been the subject of extensive public review.

In addition, it is my understanding that the National Park Service also issued a Wildland Fire Management guideline in 1978, known as NPS-18. This document spells out in great detail the policy of the Service and the role of each management unit in implementing that policy. It guides all employees in the conduct of approved fire management activities. Based first upon the policy and secondly on the guideline, each park with vegetation capable of burning prepares its own fire management plan. As a result, Yellowstone National Park began updating its own Fire Management Plan, originally developed in 1972 and updated in

1976. This plan also had public review. We would be pleased to provide you with with copies of all of these documents.

Mr. Chairman, the National Park Service fire management in Yellowstone has been described as a complete "let it burn" approach to natural fire. In reality, the park staff evaluates every fire that occurs. Some of these fires are suppressed immediately, most go out on their own, and some are monitored. A fire that has been allowed to burn initially may be reclassified as a "wildfire" any time it becomes unacceptable, and suppression action is begun. The primary criteria for decisions on a prescribed natural (monitored) fire would include threats to life and property, ability to keep the fire within the park boundary, and resources available to control the fire. If any of these change, then the fire becomes unacceptable and the appropriate suppression strategy begins. Suppression activities begin immediately on fires caused by human activities, such as the North Fork fire.

The fact that the fires in Yellowstone this year have been so intense and have behaved so erratically has heightened confusion over our actual policy. Only some of the fires in Yellowstone this year arose naturally within the park -- many others did not. Because of the unusual conditions this year, there have, in fact, been times where aggressive suppression action on a fire was taken from the beginning, yet the fire became so dangerous that fire fighting tactics had to be drastically changed. In some

cases, we were reduced to monitoring activities, even with our strong push to actively suppress or confine these fires.

No one can rejoice in the scope and magnitude of the fires this year, which have swept through and continue to burn in Yellowstone. The volatile mix of hot summer weather, high winds and extreme drought confounded even our most experienced firefighters. Yet faced with such overwhelming odds, these outstanding men and women rallied countless times to protect life and property. I have visited with many of them, and they are our true heroes -- we owe them our sincere thanks.

May I also point out, Mr. Chairman, that in spite of all the publicity, there has been no loss of life and relatively little loss of developed property so far associated with the Yellowstone fires. This is truly remarkable, in my estimation, given the unprecedented conditions, and yet another tribute to those who fought the fires.

I personally visited Yellowstone twice this summer, Mr. Chairman -- once on July 27 and again on September 10. By the time I arrived in the park the first time, the National Park Service had already made the decision to take suppression action on <u>all</u> the fires in the park. By the end of July, it had already become clear that what we were seeing in the West this year were fires that challenged long-held principles of fire behavior. Beginning in mid-September, however, a series of cold fronts began moving

93-715 0 - 89 - 2

through the northwest, bringing cooler temperatures and some precipitation. While there has not been enough precipitation to put the fires out, burning conditions have subsided and allowed firefighters to directly attack the fires in order to contain them.

The lessons of this fire season we won't soon forget. With this new knowledge, the Secretary of Agriculture and I are forming a professional review team with broad experience to objectively reevaluate current fire policy to accommodate the kinds of conditions we have seen this year. I expect them to make their recommendations to Secretary Lyng and me by December 15. After our approval, a revised policy will be issued for public comment.

Moreover, Mr. Chairman, we must understand that the maps we have brought today only define the perimeters of the fires, not the total area burned. The pattern that fires have left at Yellowstone is actually more of a mosaic, and there are a great many areas within the perimeters of the fires that remain untouched or only partially burned. We are encouraged by reports from the field about the scope of the actual damage to the park resources. We will use this information as we also consider what measures now need to be taken to restore or rehabilitate the area.

Mr. Chairman, I am pleased to have with me today National Park Service Director William Penn Mott, Jr., and the Chief Ranger of the National Park Service, Walter Dabney, who has followed the progress of these fires from the outset. We are prepared to respond to questions you or the Members of these two Committees may have at this time.

Senator MELCHER. Thank you very much.
Secretary Dunlop.

STATEMENT OF GEORGE DUNLOP, ASSISTANT SECRETARY, SPECIAL SERVICES, DEPARTMENT OF AGRICULTURE, ACCOMPANIED BY F. DALE ROBERTSON, CHIEF, FOREST SERVICE, AND ALLAN J. WEST, DEPUTY CHIEF, STATE AND PRIVATE FORESTRY, FOREST SERVICE

Mr. DUNLOP. Mr. Chairman, thank you very much.

We also have testimony that we would like to submit for the record. Attached to it are several supplements, which include some detailed information about the history of fire policy. It also includes a supplement taken from the Forest Service manual relating to fire policy. A third supplement addresses some of the programs that the Department of Agriculture is undertaking for fire economic recovery activities in the greater Yellowstone area.

Rather than go through my testimony, I wonder if I might just make a few points at the outset, and then we can go right to questions.

As has been indicated already, the Chief of the Forest Service, Dale Robertson, and the Deputy Chief for State and Private Forestry, Al West, accompany me here today.

As has been indicated by Secretary Hodel, the Department of Agriculture will join with Interior agencies and a state forester in consultation with other appropriate persons to make professional recommendations about fire policies for National Forest System lands and for national parks. That report has been asked to be made and will be made, we hope, to the Secretaries by December 15 for further action. Our goal, then, is to be prepared to make any modifications in fire policy and application of those policies in time to be implemented for the 1989 fire season.

At the outset, maybe what I ought to do is clarify from the Forest Service point of view or the Department of Agriculture point of view that there really are two kinds of fires when we talk about fire policy that result in two different types of tactics.

As has been alluded to, first there are "wildfires." A wildfire in the parlance of people who deal with them is dangerous and without redeeming virtues. Wildfires, regardless of how they are ignited, how they start, are considered to be bad fires, and immediate suppression is the tactic that is undertaken with these wildfires.

The second kind of fire in the generic sense that we deal with is the "prescribed fire." This term assumes that the fire can have redeeming virtues for the particular natural resources present on specific sites under particular and predetermined conditions.

Prescribed fires, regardless of how they start, are regarded as good fires, in contrast to the bad fires or the wildfires. Even then, they are closely monitored and allowed to burn as long as they are burning within these predetermined site-specific parameters. If they leave those parameters or those conditions change, then they, too, are treated as wildfires and suppressed.

Now, as regards the present Forest Service policy and the application of policy on National Forest System lands, these matters, of course, are often very technical and complex and, as I have indicat-

ed, are often very, very site specific in nature. So it is difficult to make generalizations.

First of all, as regards our policy, prescribed fire plays a very important role in the management of multiple-use and other lands for which the National Forest has responsibility.

As I indicated, these are fires that achieve desirable land management objectives, always in policy and application under particular site specific and predetermined conditions.

All other fires that we have to deal with are wildfires and are suppressed regardless of how they start or where they are burning, whether they are in wilderness or nonwilderness areas.

There is, however, a considerable difference between wilderness and nonwilderness in fire policy when it comes to the practice of using naturally ignited fires as prescribed fires.

So, first of all, looking at the types of lands we have that are outside wilderness, which include the great bulk of the multiple-use management lands in the Department of Agriculture, it is normal Forest Service practice to take suppression action on most naturally ignited fires.

In the event or the circumstances that the Forest Service would like to employ prescribed fire management, the policy and the practice have been to have those fires ignited by Forest Service employees only under conditions that are agreeable to them. There conditions have been predetermined rather than the happenstance of a thunderstorm or some other natural condition.

Second, as regards wilderness areas, the vast majority of fires which start in wilderness areas are treated as wildfires, and suppression action is taken immediately.

The means to carry out suppression on wildfires in wilderness areas, however, are often very different from the types of suppression that have taken place in wildfires on the multiple-use management areas. Wilderness lands are often remote. It is often difficult to get to them. Sometimes the only types of equipment that can be taken in are a shovel and an axe on the back of a smoke jumper. There is a conscious effort to try to avoid the use of heavy equipment if possible in wilderness areas, even when we are treating wildfires with suppression tactics.

Now, as regards prescribed fires in wilderness areas, most prescribed fires in wilderness areas are of natural origin. Since 1985, however, the Forest Service has had a policy that permits employees to ignite prescribed fires in wilderness area, under predetermined site specific conditions that are constantly monitored. These conditions are set forth in area fire management plans. The fires are set to reduce unnatural buildup of forest fuels, as has been discussed previously.

As compared to fires of a with natural origin, there are very few purposefully set prescribed fires in wilderness. In other words, if there is going to be a prescribed fire in wilderness, it is probably started by natural means, although we have a policy that permits us to use ignition by Forest Service employees.

In conclusion then, in regard to what has happened in the greater Yellowstone area, the Forest Service followed its policies of monitoring prescribed fires and in suppressing all other fires.

In specific fires, calculated risks were taken by the forest supervisors, the rangers and the other people responsible for making decisions. Calculated risks were taken in the judgment that they could contain certain prescribed fires. Events have proven that those fires got away from those managers, and they, and all of us, regret that very much. That is a fact that happened. There were errors in judgment about the conditions they faced at that time.

Given the facts at the time, however, the decision to monitor rather than suppress these prescribed fires did seem reasonable to them. Looking back the Forest Service would have declared these fires wildfires immediately if they had had an adequate appreciation of the conditions they were facing. No question about that.

Of course, the conditions then facing them were so unusual, so intense, that even with the immediate designation of wildfire for many of the fires immediate suppression tactics may not have been effective. It is likely that firefighters would have been overwhelmed anyway.

That outlines, Senators and Mr. Chairman, the basic approach we have taken. We would be very pleased to answer any questions that you would have about our practices and activities and intentions for the future.

[The prepared statement of Mr. Dunlop follows:]

STATEMENT OF
GEORGE S. DUNLOP, ASSISTANT SECRETARY
SPECIAL SERVICES
UNITED STATES DEPARTMENT OF AGRICULTURE

Before the
Subcommittee on Conservation and Forestry
Committee on Agriculture, Nutrition and Forestry
and the
Subcommittee on Public Lands, National Parks and Forests
Committee on Energy and Natural Resources
United States Senate

Concerning Fire Management Policies within the National Forest System and the USDA Response to Fires in the Western United States

September 29, 1988

MR. CHAIRMAN AND MEMBERS OF THE SUBCOMMITTEE:

Thank you for the opportunity to testify for the Department of Agriculture today. I am accompanied by F. Dale Robertson, Chief of the Forest Service, and Allan J. West, Deputy Chief for State and Private Forestry. I will begin with a brief overview and update of the fire situation in the Greater Yellowstone Area.

The Fire Situation in Yellowstone

The thirteen major Greater Yellowstone Area fires have burned approximately 1.6 million acres, including over 566,000 acres of National Forest lands. Without question, these fires constitute a major natural disaster. The fires in the Greater Yellowstone Area and the western States broke all records for spotting

and rates of spread. The fire suppression effort is estimated to have cost over 112 million dollars to date.

Nearly 10,000 personnel were assigned to these fires at the height of the fire activity, including Army and Marine battalions. The Nation owes a large debt of gratitude to these men and women who struggled under adverse conditions to contain and control the fires. Cooler weather and a small amount of rain and snow in September have helped firefighters gain an upper hand on most of the fires. However, containment is not expected on the North Fork, Wolf Lake, and Clover/Mist fires until at least mid-October.

The Role of Natural Fire in the Greater Yellowstone Area

Natural fires have always played a major role in the ecology of most of the forest types of western North America. This is particularly true of the lodgepole pine forests that cover millions of acres of the Northern Rocky Mountains. Lodgepole pine regenerates after fire, because it relies on heat to open the cones and release the seeds. The seeds require mineral soil, such as that exposed after a fire, to survive and grow.

The extensive even-aged forests of lodgepole pine developed in the Greater Yellowstone Area after massive natural wildfires that occurred in the 1800s. Most of these forests are now substantially older than 100 years. Because lodgepole pine is a relatively short-lived tree species, trees older than 100 years weaken and become susceptible to attack by insects, particularly mountain pine bark beetles. In the past two decades, millions of acres of mature lodgepole pine in the Northern Rockies have fallen prey to bark beetle attack.

Forest Service Fire Policy

To clarify and broaden public understanding of Forest Service fire management policy, I have attached two documents to my testimony: "Fire Management Policy in the USDA - Forest Service" (Supplement No. 1) and "The Evolution of Wildland Fire Management and Policy" (Supplement No. 2).

I would like to summarize a few key points in these documents.

From about 1935 to 1970, Forest Service fire management policy was the same for both wilderness and nonwilderness areas. The policy was simple: control all fires during the first duty shift after fire detection; but if that was not possible, try to control all fires by 10 a.m. the next day. This was the so-called "10 a.m. policy."

Several concerns led to a change in wilderness fire management policy in 1971. The first concern was the increasing buildup of fuels in wilderness areas due to the history of prompt control of all fires. The second concern was that the "10 a.m. policy" was not permitting lightning-caused fires to play their natural role. A third concern was that the policy was unnecessarily costly, because it did not allow managers the flexibility to weigh the cost of taking immediate suppression action against the resource values at risk.

The modified policy allowed lightning-caused fires to burn under carefully specified conditions in designated wilderness areas having an approved fire management plan. These fires were described as "prescribed" fires of natural

origin. All other fires, including all accidental human-caused fires, were considered wildfires and suppression action was taken on them.

Forest Service fire management policy was further revised in 1978 to provide better integration of fire protection needs into the Forest land management planning process and to help control suppression costs. The objective of wildfire suppression was changed from one of control of all wildfires by 10 a.m. to one of managing fire suppression costs and damages, consistent with land and resource management direction. If a wildfire escaped initial attack, an "Escaped Fire Situation Analysis" was prepared by the land manager to determine the most appropriate suppression response.

In 1985, Forest Service wilderness fire management policy was revised to clarify the objectives of the use and management of fire in wilderness areas, both naturally caused and human-caused. The use of fire was authorized when necessary to meet the objectives of (1) allowing lightning-caused fires to play their natural ecological role and (2) reducing the risks to life and property from wildfire within wilderness areas, and the risks to life, property, and resources outside of wilderness areas to an acceptable level.

The use of fire in wilderness areas requires an approved fire management plan. The fires may either be ignited by lightning and allowed to burn under prescribed conditions or, in certain situations, they may be ignited by qualified Forest Service employees to reduce unnatural buildups of fuels to meet wilderness management objectives. Suppression is not taken on such fires as long as they are burning within prescribed limits, and the fires are closely monitored to ensure that they remain within prescription.

The treatment of wildfires is the same in both wilderness and nonwilderness areas. Natural and human-caused fires occurring in areas whose plans do not provide for the use of fire as a management tool are considered wildfires, and immediate suppression action is taken. Also, fires in fire management areas that begin to burn beyond prescribed limits are considered wildfires and are suppressed. Such suppression action is conducted in a timely and thorough manner, with a high regard for public and firefighter safety.

In suppression action, decisions must be made on the strategy and tactics to use on each fire. This includes decisions on where to locate fire lines and on the types and amount of equipment and personnel to be used. After each fire is out, the Forest Service reviews the strategy that was used to determine if an alternate strategy might have been more effective. The Forest Service has a formal process to critique major fires to improve its skills in fire management.

Fuel Hazard Situation in Managed vs. Unmanaged Forests

National Forest Wilderness Areas and Yellowstone National Park are managed under an objective of allowing natural processes to operate with a minimum of human intervention or management. Timber harvest activities are prohibited. Consequently, these areas contain millions of acres of mature (and often dead and dying) lodgepole pine.

A primary factor making it so difficult to suppress the Greater Yellowstone Area fires has been the huge areas of forest having no road access, containing

massive amounts of tinder-dry fuels. There is little that humans can do to suppress fires in such situations, when fuel moisture dropped as low as it was and fires were fanned by hot, dry winds.

Many National Forest areas outside of Wilderness present a strikingly different situation. These National Forest areas are managed under multiple-use principles, which allow for carefully controlled timber harvesting. The economies of many small communities in the West depend heavily on such Forest Service timber harvest operations. These stands are regenerated by the Forest Service after harvest is completed.

Harvesting has removed much of the dying lodgepole, which has been replaced by young stands. Where mature stands remain, they are broken up by harvest areas. Roads built to harvest the timber provide access to firefighters and their equipment.

Forest management has other benefits as well. It creates a mosaic of forest stands of various ages. This enhances the habitat for wildlife species by increasing diversity and reducing the risk of mountain pine beetle epidemics, which are common when extensive areas of lodgepole pine become mature at one time.

Land Management Planning and Forest Service Fire Policy

The Forest Service uses its land management planning processes to determine the locations where natural fires may be permitted to burn as prescribed fires and

to establish the burning parameters applicable to such fires. Guidelines for such fires are carefully developed, and resulting fires are monitored.

Over time, the fuel in a forest must be managed or else it builds up to the point that it becomes a major hazard, susceptible to catastrophic fires. The fuel loading and fire hazard are normally managed through prescribed burning, timber harvesting, and other management practices. However, timber harvesting and other active forest management techniques cannot be used in congressionally designated Wilderness. Therefore, we must depend upon natural or Forest Service-ignited prescribed fires in Wilderness Areas.

Any time fire is used as a land management tool, however, some risks are involved. Fire is used only when managers feel the benefits substantially outweigh the risks. As we have seen this summer, this is not always effective. In a year of normal or above-normal moisture, it may be difficult to achieve an effective burn. In a year of below-normal moisture, the fires may prove to be uncontrollable and burn beyond the planned prescription.

Implementation of Forest Service Fire Policy in the Greater Yellowstone Area

Concerns have been raised that the Forest Service and the National Park Service did not act fast enough to recognize the fires as wildfires and take suppression action in the Greater Yellowstone Area. Of the thirteen major fires in the Yellowstone area, eight had immediate suppression action taken from the beginning. The other five, which were lightning-caused, were initially managed as prescribed fires, but action to suppress them as wildfires was not taken until a later date. These fires had crews assigned to them to

monitor fire movement and burning conditions so as to ensure that a particular fire remained within the limits prescribed for it. In mid-July, the decision was made to take suppressive action on all fires in the Yellowstone area.

Our policy for fighting the fires on National Forest System lands in the Greater Yellowstone Area did not differ from the fire policy already described for all National Forests. With respect to the Yellowstone fires, the decision to allow some natural fires to burn as prescribed fires seemed reasonable early this summer. In retrospect, however, based on what we know now about the weather and fuel conditions, aggressive suppression action should have been taken on all fires in the Greater Yellowstone area. Nevertheless, if immediate aggressive action had been taken on the five lightning-caused fires, it is questionable whether the attempt would have been successful. It is likely that the severe winds and burning conditions that subsequently followed would have made suppression of many of these fires difficult or impossible.

Fire Policy Review

Secretary Lyng and Secretary Hodel will soon appoint a Fire Policy Review Team to review Forest Service and National Park Service fire policy for national parks and wilderness areas. They became convinced that this review is needed based on their personal observations of the Yellowstone fire situation on September 9 and 10. The review team will include professionals from the National Park Service, Forest Service, Bureau of Land Management, Fish and Wildlife Service, Bureau of Indian Affairs, and a State Forester. The team will consult with experts from the academic community, the National Fire Protection Association, and others as needed. The team will also provide

opportunities for public officials, including the Western Governors Association, interest groups, and citizens to express their views. The team will report back to the Secretaries with its recommendations by December 15.

Fire Recovery and The USDA Response

Secretary Lyng has established a high-level interagency task group to expedite USDA responses to requests for assistance from those affected by these fires. As Assistant Secretary of Agriculture, I have been designated by Secretary Lyng to chair the USDA Fire Economic Recovery Task Force.

This task group is made up of officials from the Agricultural Stabilization and Conservation Service, Soil Conservation Service, Forest Service, Farmers Home Administration, Animal and Plant Health Inspection Service, and Office of the General Counsel. This group is assessing the damage done to private lands and businesses and is coordinating the efforts of all USDA agencies in providing assistance within the scope of our existing authorities.

Mr. Chairman, I have attached a supplement to my statement (Supplement No. 3), which identifies the agencies in the Department of Agriculture that can provide assistance to those impacted by the recent western fires, including the types of assistance available. The officials of these agencies have a high level of awareness and familiarity with services and programs that can assist in restoration efforts after this unprecedented fire season.

Last Saturday, I testified in Bozeman, Montana, before the Subcommittee on Rural Economy and Family Farming of the Senate Small Business Committee on the

kinds of USDA assistance available to those ranchers and small business owners who have been affected by the fires. The Department of Agriculture has already held several public meetings in affected communities to outline the assistance available under existing programs. We intend to hold additional meetings in other communities and to work with affected individuals so that they will be fully informed about which USDA programs are applicable to their specific circumstances.

The Department's plan of action for the post-fire recovery effort includes four major elements:

(1) Immediate emergency rehabilitation of areas disturbed by fire suppression activities, and grass seeding of areas with high erosion potential is underway.

(2) Interagency post-fire recovery teams have been established for each fire to prescribe emergency and long-term treatment measures.

(3) A Washington Office coordination team has been formed for better coordination of the various post-fire recovery teams within the agency.

(4) An interdepartmental fire recovery team has been formed for the Greater Yellowstone Area.

Resource experts are assessing natural resource damage. In some areas, we received sufficient rain or snow to initiate vegetation recovery. This moisture, along with additional rain and snow this winter, will be the key to

vegetative recovery in the burned areas. Wildlife is returning to burned areas as soon as the fires have cooled. We are still assessing damage to fishery resources.

The emergency rehabilitation effort on burned National Forest System lands is designed to prevent additional damage to soil and water resources that result from fires. The removal of vegetation and ground cover increases runoff and susceptibility to erosion. Sometimes serious downstream flooding can result from significant fires. By taking immediate action to reseed severely burned areas and perform other erosion and runoff control actions, the risk of additional loss is reduced.

Wilderness areas present a special challenge in fire recovery prescriptions. Often these areas will recover without special treatment. In cases where onsite or downstream risks are high, special treatments may be necessary to provide immediate resource protection while protecting wilderness characteristics of the area as required by the Wilderness Act of 1964. For example, the law requires that, to the extent feasible, we maintain the native plant species. Generally, our choice is a short-lived cover crop, such as annual rye, that will not hybridize with local species or offer serious competition to native recovery. We anticipate that such seeding will be necessary in some Wilderness Areas that have been severely impacted.

Mr. Chairman, I hope that my testimony and the three supplements I have mentioned will be helpful as you review our response to fires in the West. We will keep you and other Member of Congress informed as the USDA/Interior Fire Policy Review Team carries out its work over the next three months. Our

intention is to have any needed policy changes in place well before the 1989 fire season. We will also keep you informed about the activities of the USDA Fire Economic Recovery Task Force.

This concludes my prepared testimony. I ask that the three supplements attached to my statement be included in the hearing record. Chief Robertson and I will be pleased to respond to your questions and to provide additional information at your request.

USDA Supplemental Statement No. 1

FIRE MANAGEMENT POLICY IN THE USDA - FOREST SERVICE
(Excerpted from the Forest Service Manual)

OBJECTIVES: The objective of Forest Service fire management policy is cost effective integration of fire protection and use in land and resource management planning and direction. The objective of wildfire suppression is to suppress all wildfires at minimum cost and damage, consistent with management direction. Prescribed fires are used under specified conditions to safely and economically achieve land and resource management objectives identified in Forest plans.

TWO CATEGORIES OF FIRES: Fires occurring on National Forest lands are designated as either wildfires or prescribed fires. A prescribed fire is any wildland fire burning under preplanned, specified conditions to accomplish specific planned objectives. It may result from either a natural ignition (lightning) or be ignited by fire managers. A wildfire is any wildland fire not designated and managed as a prescribed fire within an approved prescription.

WILDFIRE SUPPRESSION: Forest Service fire suppression policy is to conduct wildfire suppression action in a timely, energetic, and thorough manner with a high regard for public and firefighter safety. Every wildfire requires an appropriate suppression response in timely manner with appropriate forces based upon established fire management direction and cost efficiency. Suppression strategies considered in determining the appropriate suppression response range from prompt control, minimizing acreage burned, to more indirect methods of containment and confinement when these alternatives are less costly than control.

Initial suppression action, upon discovery of a wildfire, is taken to minimize suppression cost and damages, and to prevent escape of the wildfire. An escaped fire situation analysis is prepared for those wildfires escaping initial action to provide an analytical basis for determining the most appropriate suppression response in the particular situation. Potential suppression costs, values at risk, firefighter and public safety, environmental, social and political concerns are evaluated.

PRESCRIBED FIRE MANAGEMENT: Prescribed fire plans are prepared in advance of all prescribed fires. Personnel conducting prescribed fires must meet training and qualification requirements. If prescribed fires exceed prescription and cannot be brought back into prescription with project funds, they are declared a wildfire and suppression action taken.

WILDERNESS FIRE MANAGEMENT: The objectives of fire management in wilderness are to permit lightning-caused fires to play, as nearly as possible, their natural ecological role; and to reduce, to an acceptable level, the risk and consequences of wildfire within wilderness or escaping from wilderness.

Wildfire suppression policy in wilderness is the same as it is outside of wilderness. Considerations in determining the appropriate suppression response differ inside wilderness, however, due to differing values, constraints, and management objectives.

Prescribed fires in wilderness require an approved plan. They may be ignited by lightning and allowed to burn under prescribed conditions or, in certain situations, ignited by Forest Service employees to reduce unnatural buildups of fuels to meet wilderness fire management objectives.

USDA Supplemental Statement No. 2

THE EVOLUTION OF WILDLAND FIRE MANAGEMENT AND POLICY

I. INTRODUCTION

The objectives of this paper are to:

A. Provide background information on historical fire management in the United States.

B. Describe the evolution of public wildland fire management policy, particularly in the Forest Service.

Knowledge of the evolution of fire management policy and the forces which shape it provide a better understanding of the role of fire management in public land and resource management today, and what may influence its role in the future.

II. THE FORMATIVE YEARS

Public concern about the threat of wildfires to persons and property began with the "cut and get out" timber harvest practices on private lands in the Lake States during the late 1800's and early 1900's. These practices resulted in tremendous accumulations of slash, which were subsequently ignited by land clearing operations as people moved westward, settling the land. Catastrophic wildfires were common.

In 1885, a wildland fire control program was initiated in the Adirondacks Reserve in New York. Wildfire suppression was initiated in the West in Yellowstone National Park in 1886. A House of Representatives' report stated that the most important duty of the Park Superintendent and his assistants was to protect the forests from fire and axe. Fire suppression responsibility in the Park was assigned to the Army, the beginning of organized wildland fire suppression in the Federal sector. The Army soon demonstrated that wildfire could be effectively controlled.

The 1905 Forest Reserve Use Book cited three principal duties of Forest Officers:

- o To protect the Reserves against fire.
- o To assist the people in their use.
- o To see that they are properly utilized.

Our roots in European forestry provided American foresters with a vision of fire-proofed forests - there could be no professional forestry without the control of fire. At the same time, fire was being used as a management tool in the South and in California where it commonly referred to a "light burning" by the locals or "Pauite forestry" by its opponents. "Light burning" or "controlled burning" in general became a political controversy.

In 1910, catastrophic fires burned over 5 million acres in the Northern Rockies. In the same year, William James published "On the Moral Equivalent of War" -- what forest firefighting was to become in the Forest Service, a paramilitary fire control cause that shaped Forest Service fire policy for decades. The debate over the merits of "light burning" largely disappeared. Chief Forester Henry Graves wrote that fire prevention was 90 percent of forestry. The Forest Service became entrenched into a single policy line of fire prevention and control that was to last for more than 50 years.

The debate over "light burning" versus protection rekindled in the early 1920's, even within the Forest Service. Forest Service Chief William Greely, when asked to summarize the main problems with the Forests in 1923, replied "stop the fires." The "light burning" controversy was overcome by "professional forestry" advocates by 1924 as the Forest Service struggled for political survival and forestry for its scientific credibility. The 10-acre control objective and the economic philosophy of minimizing cost plus loss became Forest Service fire suppression policy in 1926.

III. THE 10 A.M. POLICY

The Tillamook burn occurred in 1933, charring 300,000 acres of essentially virgin timberland in the Northwest. This catastrophic occurrence and the newfound availability of manpower in the CCC program led to the establishment of the 10 a.m. policy and hour control objectives in 1935. Organized emergency fire crews, the management of organized fire suppression forces, and the development of formal line construction methods emerged during the CCC's. The moral equivalent of war had been declared on wildfires. The 10 a.m. policy was considered to be consistent with fire control objectives established in 1926 in that the sum of suppression cost plus loss was expected to be less under an all out suppression policy, eliminating uncertainty and lack of aggressiveness.

IV. THE AGE OF MECHANIZATION

World War II led to the age of mechanization in fire control. The war effort resulted in the development and eventual availability of military equipment suitable for fire control. Fire control equipment development centers were established to take advantage of opportunities for mechanization.

Equipment development efforts with aerial retardant delivery led to the first operational use of air tankers in 1956. Operational use of helicopters soon followed.

The fire suppression resources of organization, manpower equipment, and technology were largely developed and operational by the early 60's.

V. THE AGE OF SPECIALIZATION

Other than a modification in 1971, providing for limited lighting-caused fires in wilderness, the Forest Service 10 a.m. policy continued unchanged. In 1971, the 10-acre suppression policy was incorporated as a presuppression planning objective. This was followed by a major fire planning effort in 1972. Forest Service presuppression expenditures skyrocketed in the 1970's as a result of "fire departments" developed in response to 1972 fire planning and greatly

increased funding. Numbers of fires and acres burned also increased in spite of expanded presuppression programs in many of the wildland fire control agencies.

As wildland fire protection programs became larger and more sophisticated, federal and state agencies found it necessary to formally coordinate programs, standards, and procedures. The National Wildfire Coordinating Group (NWCG) was chartered in 1976 for this purpose.

The National Interagency Fire Qualification System (NIFQS) was developed under the sponsorship of NWCG for the purpose of assuring a nationwide source of professional wildland firefighting personnel qualified for the positions for which they had been certified.

VI. FIRE MANAGEMENT COMES OF AGE

The Forest and Rangeland Renewable Resources Planning Act of 1974 (RPA) and the National Forest Management Act of 1976 (NFMA) required that both the use of prescribed fire and the control of wildfire be an integral part of the Forest Service land management planning process. Further, fire management was to be responsive to resource management objectives in a cost-effective manner.

In 1977, the Chief directed that a study of presuppression effectiveness be conducted. The study concluded that fire managment objectives must be directly related to resource values and to the costs of protecting them, and that protection should be commensurate with values and risks. The product should be an accountable, efficient, and cost-effective program.

Forest Service fire policy was revised in 1978 to provide for the integration of both fire protection and use in National Forest land and resource management planning. The objective of wildfire suppression was changed from one of prompt control of all wildfires by 10 a.m. to one of minimizing fire suppression costs and damage, consistent with land and resource management direction. An escaped fire situation analysis (EFSA) was to be prepared by the land manager whenever a wildfire escaped initial attack to determine the most appropriate suppression response. Appropriate fire suppression strategies included containment, confinement, and control. Prescribed fire to protect, maintain, and enhance National Forest resources was reaffirmed as an approved management practice.

In 1983, Forest Service fire management policy regarding appropriate suppression response was further clarified to insure that initial suppression action as well as escaped fire suppression strategy was based upon an objective of minimizing suppression costs and resource damage.

Forest Service wilderness fire management policy was revised in 1985, clarifying the objectives of wilderness fire management and the use of prescribed fire within wilderness. Forest Service-ignited prescribed fires were authorized when necessary to meet the objectives of (1) allowing lightning-caused fires to play their natural role and (2) reducing the risk of wildfire within wilderness to life and property, and to life, property, and resources outside of wilderness to an acceptable level.

VII. THE AGE OF ORGANIZATIONAL SOPHISTICATION AND INTEGRATION

The increasing complexity of wildland fire suppression in the urban/wildland interface in southern California and a disastrous fire season in 1970 led to implementation of the FIRESCOPE program. The Incident Command System evolved from this program in response to the need to more effectively integrate and localize the suppression resources of Federal, State, and local fire protection agencies.

Recognizing that the presence of two separate suppression management organizations was undesirable in the long run, the National Wildfire Coordinating Group sponsored a study in 1980 to evaluate both the Large Fire Organization and the Incident Command System. NWCG adopted the National Interagency Incident Management System (NIIMS) in 1981 as a result of this study. NIIMS built on the strengths of the LFO, ICS, and other FIRESCOPE technologies to provide a common, integrated emergency management system for the interagency management of emergency incidents of all types. By 1982, all Federal agencies and many States had adopted NIIMS for implementation. The Incident Command System element of NIIMS was fully implemented by all Federal agencies and in many States by 1985.

In 1986, increasing fire protection concerns in the wildland/urban interface were recognized as being nationwide in scope. A national initiative involving Federal, State, and local fire protection agencies and related organizations was begun with the objective of reducing the loss of life, property, and resources from fires occurring in the wildland/urban interface.

VII. FIRE MANAGEMENT POLICY EVOLUTION IN OTHER AGENCIES

The evolution of fire management policy in the Forest Service reflects the general evolution of wildland fire management policy in all Federal wildland management agencies. Cooperative agreements with the Forest Service for fire protection had virtually assured similar fire management direction for many years.

The Bureau of Indian Affairs pioneered the use of prescribed fire among the Federal agencies. Recognition of the natural role of fire and of prescribed fire as a management tool evolved in the Park Service, the BLM, and the Fish and Wildlfie Service much as it had in the Forest Service; at times ahead, at times behind.

IX. SUMMARY

It was as keeper of the flame that man first became steward of the land. Effective fire protection became the foundation for natural resource investments and intensive management. Organized fire suppression was founded upon the premise that control of the occasional large catastrophic fire was most effectively done by "hitting them hard and keeping them small."

Through years of development and improvement in techniques, equipment, and capability, fire suppression personnel in Federal and State wildland fire protection agencies became very proficient. Expertise, capability, and funding led to specialization and the emergence of a fire department concept in the 70's. Fire suppression emphasis in the 80's is upon cost efficiency and more

effective interagency utilization of suppression resources. The concept of fire suppression being everyone's business is also returning due to budgetary constraints and more cost-efficient fire management programs. In recent years, land management agencies have acknowledged, and have begun to provide for, the natural role of fire in wildland ecosystems. Cost-efficient fire management programs consistent with resource management objectives have emerged. Skills in predicting fire effects, evaluating fire management alternatives, developing and executing prescribed burning plans, and smoke management are now essential, in addition to the traditional prevention and suppression skills.

The path followed by wildland fire managers has been a noble one. Dedicated personnel did what they had to do at the time, proudly and well.

References:

- "Fire in America," Stephen J. Pyne.

- "Fire Management Policy in the National Forests - a New Era," Thomas C. Nelson, Journal of Forestry, Vol. 77, No. 11, Nov. 1979.

- USDA-Forest Service Manual, 5100.

USDA Supplemental Statement No. 3

USDA ASSISTANCE TO FARMERS, RANCHERS AND BUSINESSES IMPACTED BY THE WESTERN FIRES

I. A USDA Fire Economic Recovery Team has been established by Secretary Lyng in the office of Assistant Secretary Dunlop to expedite USDA responses to requests for assistance from private entities affected by the fire. This task group is made up of officials from the Agricultural Stabilization and Conservation Service, Soil Conservation Service, Forest Service, Farmers Home Administration, Animal and Plant Health Inspection Service, and Office of the General Counsel. This group will seek to assess the damage done to private lands and businesses, and coordinate the efforts of all USDA agencies in providing assistance within the scope of existing authorities.

II. Rural Enterprise Teams are available, upon request, to provide advice and assistance to rural communities and businesses impacted by the western fires. These teams are comprised of officials of USDA agencies, namely the Forest Service, Farmers Home Administration, Soil Conservation Service, Agricultural Stabilization and Conservation Service, Extension Service, Agricultural Research Service, Federal Crop Insurance, and National Agricultural Statistics Service. These USDA officials have a high level of awareness and familiarity with existing services and programs that assist in the rebuilding process.

Rural Enterprise Teams work closely with the State officials. This relationship, combined with expertise from the private sector, other Federal Government agencies, like the Small Business Administration and the Economic Development Administration and university personnel, will help the team assess individual situations and make recommendations to use the tools of the Federal and State Government.

III. The Soil Conservation Service (SCS) can provide assistance through their Technical Assistance Programs and Snow Survey and Monitoring Service.

The SCS is available to provide technical and financial assistance under either the "Conservation Technical Assistance Programs" or by the "Emergency Watershed Protection Program." Both programs provide engineers, agronomists, conservationists, and soil experts who can evaluate and direct rehabilitation efforts. These efforts are designed to control erosion and reduce sediment pollution by use of cultural practices, sediment structure construction, re-vegetation and other practices. These conservation measures would serve to protect surface water supplies, road systems, stream systems, and developed areas from excessive runoff and sedimentation damage for the period of time required to reestablish permanent vegetative cover.

Assistance teams could be made available upon request to evaluate the emergency watershed protection needs and estimate cost for reducing

serious fire-caused erosion and runoff problems. The Forest Service acts as a partner with SCS on these efforts.

The Snow Monitoring Service provides a vital forecast of potential snow-melt runoff which in turn provides a forecast of potential soil erosion areas.

IV. The Farmers Home Administration (FmHA) has a number of programs, some specifically intended for disaster relief and others available for agriculture and rural development in general, that may provide assistance. Disaster-related assistance is available under the emergency (EM) loan progras which provides low-cost loans to farmers and ranchers who suffer production or physical (structures, equipment, livestock, etc.) losses in counties covered by disaster designations.

In addition, new legislation being implemented shortly provides FmHA guarantees for loans make to rural businesses and other enterprises which have suffered losses due to drought, hail, excessive moisture or other related conditions, including wildfire, during 1988.

FmHA's conventional programs, which may be appropriate to the disaster-related needs of farmers and ranchers, as well as other rural residents and businesses, include direct and guaranteed loans for farm ownership and operations, direct loans for rural single family home ownership and rental housing, loans and grants for rural water and waste disposal systems, loans for a wide range of essential community facilites, and guaranteed loans for business and industry.

Drought Disaster Counties -- 76 counties in the States of Idaho, Montana and Wyoming either have been declared by Secretary Lyng as drought disaster counties or the request is currently under review. These counties are as follows:

IDAHO	MONTANA	WYOMING
12 counties requested, Secretary decision pending: Blaine, Butte, Cassia, Elmore, Franklin, Lincoln, Washington, Camas, Custer, Bear Lake, Clark, Oneida	41 counties designated: Fergus, Golden Valley, Garfield, Rosebud, Stillwater, Teton, Yellowstone, Cascade, Judith Basin, Musselshell, Phillips, Wheatland, Big Horn, Petroleum, Fallon, Hill Sheridan, Toole, Wibaux, Blaine, Carter, Chouteau, Custer, Liberty, McCone, Pondera, Prairie, Powder River, Daniels, Dawson Richland, Roosevelt, Treasure Valley, Beaverhead, Glacier, Park, Meagher Broadwater, Cargon, Lewis & Clark	23 counties (entire State) requested, the following designations have been made: Campbell, Converse, Crook, Johnson, Niobrara, Weston. Decisions on the remaining counties are pending.

VI. The Agricultural Stabilization and Conservation Service (ASCS) administers several Commodity Credit Corporation (CCC) programs on behalf of CCC under several acts, including the Disaster Assistance Act of 1988, which provide the following assistance to producers located in the fire area, as well as other producers impacted by the drought and other natural disasters:

- o Emergency Feed Programs (EFP) will provide cost-share assistance on feed losses, including stored feed and hay stocks.
- o The Emergency Feed Assistance Program (EFAP) provides producers with the opportunity to purchase CCC-owned grain at 75 percent of the county loan rate for such commodity. To be eligible, producers must have suffered at least a 40-percent loss of livestock feed.
- o All counties in Montana and Wyoming and 31 counties in Idaho have been designated for EFP and EFAP.
- o Producers of field and forage crops may also be eligible for disaster payments.
- o Livestock producers in drought-stricken counties (over 2,200 counties in 41 states) have been permitted to harvest hay and to graze livestock on the acreage removed from annual crop production under the "farm program" production adjustment provisions.
- o Producers who have 10-year contracts to remove highly erodible cropland from production under the Conservation Reserve Program have been allowed to harvest hay or other forages from this acreage for their own use or sale in the drought-stricken counties. Producers in non-drought areas may also harvest hay from this acreage if the hay is donated to producers in drought affected areas.

Senator MELCHER. Thank you very much, George.

First of all, I would like to ask Secretary Hodel for clarification. You and others have mentioned the Leopold Report, and I have to confess I am aware of the report but have never read it. I did, however, take out this one section that says:

> Of the various methods of manipulating vegetation, the controlled use of fire is the most natural and much the cheapest and easiest to apply. Unfortunately, however, forest and chaparral areas that have been completely protected from fire for long periods may require careful advance treatment before even the first experimental blaze is set. Trees and mature brush may have to be cut, piled and burned before a creeping ground fire can be risked. Once fuel is reduced, periodic burning can be conducted safely and at low expense. On the other hand, some situations may call for a hot burn.

It really is not the report, then, that says just let that fuel stack up on the ground. It is more or less of an action at the right time to reduce the fuel.

Of course, that was in the report. If I am not mistaken, the report came out in the 1960's.

Secretary Hodel. 1962.

Senator MELCHER. 21 years later in a letter to the Superintendent of Sequoia and Kings Canyon National Parks dated June 9, 1983, here are the last two paragraphs of that letter signed by Dr. Leopold. I am just going to read the last paragraph. It is the only one that is really pertinent.

Management issues of this kind—that is how you manage a forest—"involve judgment followed by action. They are not resolved simply by "allowing natural ecosystems processes to operate".

I still espouse the idea of active manipulation to maintain a more or less natural aspect to the park as seen by a visitor. As I recall, this is what we were trying to say in that report to Secretary Udall so long ago, 21 years prior to that.

The only reason I mention that is because I think implementation of the Leopold Report, no matter whether it was good or bad or how good or how bad it was, it really was not recommended that you just have this fuel left there for nature to control. It is very clear from the report that it was their recommendation that you had to have some management along with nature even if you are going to let some fires burn if they happen to start.

In other words, it was very specific, it seems to me, about removing the fuel. That is the most significant point, I want to have clarified, on what we should be expecting in the future to remove the fuel so we do not run the risk of such hot fires.

Secretary Hodel: Mr. Chairman, I have not read the Leopold Report either. It is a 150-page report.

My understanding is it covers a wide array of national parks, and it attempted to make recommendations that could underlie policy for all of those national parks. That is what then was done at the direction of Secretary Udall.

That policy, the Udall policy, was subjected to three subsequent reviews in the 1970's, the latest being in 1978. I think that probably all reviewers looked at the policy from their particular point of view, but those who were concerned or aware of Yellowstone Na-

tional Park would have been looking at it in light of the experience in Yellowstone.

The experience in Yellowstone was that there was very little combustibility generally in Yellowstone National Park. As a matter of fact, over the 16 years in which this policy has been in application—Director Mott has the figures—here have been a number of fires which have started, and they have burned a very restricted, very limited number of acres simply because of the nature of the weather and conditions there.

So I suspect that when the policy was being reviewed, there really was not a significant thought that this was creating an enormous risk in Yellowstone, at least by those who were most knowledgeable. In the most recent occasion, there was very limited comment about the prescribed burn policy.

So I think what will happen, clearly, is the people that Dick Lyng and I have identified and given the charge—if you will—of coming back with recommendations, may not only look at the Leopold Report but they will look at this year's experience and say wait a minute, when you permit this kind of a fuel buildup, when you have that one in 100 years or one in 50 years, or whatever kind of year this turns out to have been meteorologically, when you have that year you will not have fuels left around those facilities which you are then going to spend $100 million with 9,000 people trying to defend.

As I have said, I do not think you can say a policy has worked if it meant that for weeks on end we were not sure whether we could save major facilities in Yellowstone National Park.

I would expect them to come back with a recommended means of trying to reduce the fuel load. What that would be, frankly, I do not think anybody can tell me today.

Senator MELCHER. I think what I am trying to get at, have you as Secretary reached the conclusion that you have to remove the fuel load?

Secretary Hodel: It may not be too significant, Mr. Chairman, what I conclude as Secretary at this point because in the end, we are going to be depending heavily upon the advice of professionals whom we have charged with coming back with recommendations. Then there will be the public reaction to the recommendations of those professionals, all of which may occur after I am not in this job any longer.

Even if I were, I would think I would be heavily influenced; and I would think my successor will be heavily influenced by what he is given in the way of recommendations. I have said all along, since we have begun talking about the future of policy that I would be very surprised if there is not a recommendation for a means of reducing the amount of fuel adjacent to facilities or locations that we would deem defendable, and that have to be defended, because that is what precipitates the enormous cost we incur and the great turmoil.

Senator MELCHER. I know this does not do us a whole lot of good right now, but a report issued in 1987 by the Park Service indicated that over 50 percent of the greater Yellowstone area had moderate to high potential for high intensity fires.

It was no secret. Even the casual observer could see that there was too much fuel there and it was a very grave risk, but even the reports prepared by the Park Service identified it as a very grave risk.

I guess what I am really after from you, Mr. Secretary, is if a group is going to figure out what should be the policy for next year, can we be assured that we do not have to go through what did the Leopold Report have, what kind of criteria should we have to make sure that this sells politically?

I would like to know. I think you have done it, but I want to hear you say that this group was told to get to work quickly enough now so that you can implement some better policy for next year to avoid the risk?

For instance, Glacier is just waiting there. It started. There are serious enough burns in Glacier that I am aware of starting out of the Flathead Forest with the same circumstances of fuel on the ground, and dead lodgepole buildup of that fuel is there, too, and just waiting for a fire to start to have the hot, uncontrollable fires that occurred in Yellowstone.

Secretary HODEL. Let me approach it this way, Mr. Chairman. I have with me copies of the memorandum signed by Secretary Lyng and me dated September 28 to our respective deputy and under secretaries. The direction in our letter to them says, "The plan should include a process to select senior representatives of each agency that can professionally review and evaluate the current policy and make recommendations for change."

In the memorandum to the Forest Service, National Park Service, Bureau of Land Management, Fish and Wildlife Service, Bureau of Indian Affairs and our Office of Policy Analysis in the Department of the Interior, the second paragraph reads:

> The objective of the review process is to determine the appropriate fire policies for national parks and wilderness areas which address the concerns expressed by citizens and public officials about the management of fires on these lands as a result of the Yellowstone fire situation. The fire policies must be reviewed and modified as necessary prior to the beginning of the 1989 fire season.

So its purpose is to accomplish what I think you are asking, which is that before we enter the next fire season there will not only be a revised policy but one which has been subjected once again to a broad public review.

Senator MELCHER. That is dated yesterday?

Secretary HODEL. September 28.

Senator MELCHER. We will make it a part of the record.

Secretary HODEL. Yes, I will be happy to submit that.

Senator MELCHER. That is precisely what I am searching for.

What is the makeup of the professional review team?

Secretary HODEL. The team will be co-chaired by representatives of Interior and Agriculture. Charles Philpot will be the co-chair from the Department of Agriculture and Brad Leonard from the Department of the Interior.

There will be representatives of the National Park Service, Forest Service, Bureau of Land Management, Fish and Wildlife Service, and the Bureau of Indian Affairs. The individuals are named here in the letter that we are submitting for the record.

It will also invite representatives of the National Association of State Foresters to participate in the review process.

They are also directed to consult with knowledgeable persons from, but not limited to, State and local governments, the academic community, forestry, fire protection organizations, and on and on. We are trying not to restrict people with whom they can talk to obtain recommendations and advice.

Senator MELCHER. Are there any nongovernment personnel included?

Secretary HODEL. Not on the team, but they are directed to consult with knowledgeable persons from a wide array of government and nongovernment entities.

Senator MELCHER. Secretary Dunlop, you have a bigger problem than do the national parks simply because you have more area to cover.

Mr. DUNLOP. 191 million acres in the National Forest System, yes.

Senator MELCHER. Anything like Yellowstone and Glacier, you have forests around them anyway.

Now, can you implement a shift? First of all, are you planning on a shift? Do you have the same idea that the directions for this group to act, to develop a policy, is going to be a change in policy?

Mr. DUNLOP. Yes, sir. We think that there probably will be occasions where we can certainly review all of our policies, just as the Park Service will.

There are some distinctions between the ways in which the two organizations look at fire management now. They will have to explore what those are, get a better idea of them, and perhaps think of some things that could be changed. We certainly are open and eager to do that and are pleased to co-chair the review team with professional people.

For instance, Mr. Chairman, we believe the fire policy review team should analyze such questions as the relevancy or irrelevancy of how a fire starts. Should it really make any difference whether a fire is started by lightning or by man, either as an accident, or arson, or as a purposely started prescribed fire? Apparently a naturally started fire is sometimes treated as a "good" fire just because it is natural—even though weather conditions or fuel load conditions at that particular time and location would not warrant the fire being treated as a prescribed fire. This is the kind of policy question that needs review. Other such issues would include: more detailed policies and practices on preplanning for prescribed fires; the establishment of a more systematic and uniform decisionmaking process for determining how to deal with a prescribed fire once it threatens to go beyond prescription; and a better assessment of fuel hazard conditions on a natural basis, especially in wilderness areas.

Senator MELCHER. Do you think you can do it by the fire season next year?

Mr. DUNLOP. Oh, yes, sir. We will have our reports ready for the Secretary by December 15, which means we will get on it right now as the highest priority.

Senator MELCHER. Is it going to take any more money?

Mr. DUNLOP. I do not think so. We are planning to use existing resources now available through the Office of the Secretary and then through the agencies.

Senator MELCHER. What about this question of experienced firefighters that I earlier outlined in our opening statement?

Mr. DUNLOP. In what regard, Senator? Do you mean participating in the——

Senator MELCHER. Not on the task force. For your better policy next year. About all you are going to get done in the next few months is just decide what is the policy going to be.

What about this question of how many experienced firefighters you are capable of hiring?

Mr. DUNLOP. You mean the numbers of actual people on the fire line and that kind of thing? If I may, I would like to ask the Chief and/or the Deputy Chief to address those matters, as they employ, manage and supervise this activity.

Senator MELCHER. Yes. Would you do that, Dale?

Mr. ROBERTSON. As I recall your comments, Mr. Chairman, you were concerned about the people that were laid off because of unemployment costs.

Senator MELCHER. Were not hired.

Mr. ROBERTSON. Yes.

Senator MELCHER. Were you aware of that?

Mr. ROBERTSON. I was not aware of that. I am aware that the budget that our local Forest Service people have has to pay both workmen's compensation and unemployment. So as they manage their budget, I am sure they are looking at that. I would hope, however, that that does not result in us not hiring qualified firefighters when we need them.

Senator MELCHER. Why not find out? It is easy to do. All you have to do is look over the roster and see who is not there. They can tell you. They can tell you who is not there from last year. Then find out why they are not there.

Is that not important?

Mr. ROBERTSON. Yes, that is important, and I will find out.

Senator MELCHER. I do not know when you decided that each district is going to have to pay out of their own funds the unemployment costs if the laid off firefighter or seasonal employee happens to be eligible for unemployment and also for any accident insurance.

When was that changed, by the way? Has it been in the last two years or the last three years?

Mr. ROBERTSON. It was about two or three years ago. Those costs used to be included in the budget of the Department of Labor. They were shifted over to each agency's budget a few years back.

Senator MELCHER. It is my understanding that is when it became a matter for each district not having enough money to hire as many as they want.

I am not making a misstatement, am I? Districts have not been able to hire as many firefighters and trail people as they wanted, have they?

Mr. ROBERTSON. You can look back at our work force, and there has been about a 25-percent reduction in our work force in the last

93-715 O - 89 - 3

seven or eight years. A lot of that reduction has come from our field force that fights fires.

Senator MELCHER. A big chunk of it has been there, not in dollars but in numbers of personnel; is that correct?

Mr. ROBERTSON. I do not know the specific proportions, but I would suspect it is about proportionate with the overall reduction.

Senator MELCHER. There is one thing to keep in mind here. What effect does that have on safety? I have drawn the conclusion that that has some effect on safety on the fire line when you do not have as many experienced firefighters as you could have.

Is that true? I am not drawing a false conclusion, am I?

Mr. ROBERTSON. Well, it is always good to have as many experienced people as possible, but we do not put people on the fire line who are not experienced.

Senator MELCHER. I am not talking about a 2- or 3-week training or 2-month training. I am talking about somebody that has fought fires over the past six or seven years and really knows what they are doing because they have been out there on all the various things that can happen in a fire. I do not suppose there is any fire that is the same as the last one. They are all different, and it takes experience to be able to react properly.

Is that not a safety factor, protecting the lives and limbs and the health of the people that are fighting fire with them?

Mr. ROBERTSON. I think there is a relationship between experience and safety, yes.

Senator MELCHER. I hope I have worried you a little bit today because I have sure been worried about this policy as I saw it unfolding in our neck of the words.

Senator McClure, I believe, can add to this.

Senator MCCLURE. I wanted to pursue that a little because I am a little puzzled.

I do not know whether Senator Melcher is talking about the people that you have on relatively full time, full-time employees, or whether you are talking about seasonals who are hired every year on a seasonal basis, or whether you are talking about people that are directly associated with fire suppression on fires as they occur.

Which of those classes are you talking about?

Mr. ROBERTSON. I was referring to our seasonal firefighting forces.

Senator MCCLURE. You are talking about seasonal. You are not talking about those who are hired to go out and fight a fire.

Now, there are two classes, are there not? Those that are seasonal, not full-time employees, less than full-time, but you hire them regularly year after year for a given purpose for a portion of the year. Those are seasonal employees.

Mr. ROBERTSON. Yes, that is correct.

Senator MCCLURE. Then you have the people that actually go out and fight on the fire, which may not even be in the seasonal employee; is that correct?

Mr. ROBERTSON. We have some of our permanent employees who fight fires when we need them, and then we have certain crews that we train and call in when we need them.

Senator MCCLURE. The ones that you call in when you need them are not called seasonal employees, are they?

Mr. ROBERTSON. No, they are not.

Senator MCCLURE. Those that are called in to fight a fire, they are only called there when the fire breaks out and they are needed out on the fire line. Those are not the ones you are talking about here, are they?

Mr. ROBERTSON. I am not talking about those. I am talking about the number of seasonal employees in the Forest Service that have been reduced over the past few years. That is the bulk of our firefighting force, the firefighters.

Senator MCCLURE. You still have the capacity to hire people to go out and fight fires when fires occur?

Mr. ROBERTSON. Yes, and this year we hired 4,000 people late in the year.

Senator MCCLURE. Have you been restricted on the number of people that you can hire to go out and fight the fire?

Mr. ROBERTSON. No, we have not.

Senator MCCLURE. You have no budgetary restrictions on that?

Mr. ROBERTSON. We have budgetary restrictions on how many people we can hire to pay out of our normal presuppression funds; but once we get into an emergency situation and we have a fire going, then we, as you know, borrow funds from some of our other trust funds in order to fight the fire.

Senator MCCLURE. That is the point I was trying to get at so that I understood exactly which class of employees it was you were talking about here having had a reduction over the last seven or eight years, because the fire suppression money, the money that is paid for the fires that actually occur as distinguished from those that you hire on a seasonal basis, those are not restricted funds.

You do what you have to do. You borrow the money from other sources, and then you get a supplemental appropriation to cover the cost. Is that correct?

Mr. ROBERTSON. That is correct.

Senator MCCLURE. Have you had any restrictions from OMB or otherwise with respect to the hiring of people you actually need to go out and fight fire?

Mr. ROBERTSON. No, we have not, once the fire is going.

Senator MCCLURE. So all we are talking about is those you may hire before the fire breaks out?

Mr. ROBERTSON. Every year the Forest Service hires from 12,000 to 15,000 people for the summer months basically, June through September. The bulk of those people are available for firefighting. A big part of them are firefighters. That is their primary job. That is the group that has been reduced over the past few years.

Senator MCCLURE. Even though that group has been reduced, you still have tee capacity when the fire is burning to hire whomever you need or however many you need?

Mr. ROBERTSON. Yes. This year, we hired about 4,000 people in August, I believe, just to fight fires.

Senator MCCLURE. To me, that is a horse of a different color, and that really does not offend me quite so much that you may have hired fewer seasonal people but you hired more firefighters.

Mr. ROBERTSON. I was trying to answer Senator Melcher's question.

There are some experienced firefighters out there who used to be seasonal who are not being hired now for the season.

Senator McCLURE. That is correct; but not all the people you hired to fight the fires are inexperienced. You can hire experienced people to fight fires.

Mr. ROBERTSON. Yes, after we have a fire going. Yes.

Senator McCLURE. That is when you need them, to fight a fire, is it not?

Mr. ROBERTSON. Well, I would like to have them trained before I need them.

Senator McCLURE. That is the point I was trying to get at, though, to make certain where the reduction ocurred and the fact that the people you actually put out on the fire line are not necessarily inhibited by a reduction in the seasonal employment.

Is that not correct?

Senator MELCHER. I think the Chief is answering this absolutely correct. Those seasonal people have been reduced, and that is the strong nucleus of experienced people who are on that fire line. If there are 21 on the fire line and every fourth one is a seasonal one that has fought fire for a number of years, you have a better fire line. Senator McClure knows this as well as I do.

It is the seasonal ones that have been reduced, and it is the seasonal ones that only get to work seven or eight months and might draw unemployment compensation because there is no other job for them. They are let go from the Forest Service, and it is a reduction in those people that is abhorrent to me because I think it affects effectiveness in fighting fire. But more important than that, it affects the safety of those fighting the fire on the line.

Now, we are lucky in Montana, at least, where I think we have had only one or two deaths. Which was it?

Mr. ROBERTSON. We have had two firefighters killed.

Senator MELCHER. In Montana?

Mr. WEST. No; one in Montana and one in the State of Washington.

Senator MELCHER. We are very fortunate. That is very regrettable.

Senator WALLOP. You had one in the Lost fire, the helicopter pilot.

Mr. ROBERTSON. There were two firefighters and, I believe, six people killed in aircraft accidents dealing with the fires.

Senator WALLOP. They may have the distinction lost on them to say that they were not firefighters.

Mr. ROBERTSON. They were in firefighting. They were doing it.

Senator MELCHER. Senator McClure, I have taken enough time.

Senator McCLURE. Thank you very much.

I am afraid too much of the public that might be listening to this would not understand. They are thinking that somehow you cannot hire the people who go out and fight the fires, and I want to make it plain that that is not involved here.

Mr. ROBERTSON. Yes, you are correct, Senator McClure.

Senator McCLURE. Secretary Dunlop, did I understand you to say that most wilderness area fires are treated as wild fires?

Mr. DUNLOP. Yes, sir, that is correct.

Senator MCCLURE. Could you give me the statistics over the last two years in wildernesses alone how many were treated as wild fires and how many as prescribed burns and the acreage of each class?

Mr. DUNLOP. Senator, I am certain we would have to supply that for the record unless Al West would have that off the top of his head, which I doubt he does. We will certainly provide that for the record.

Senator MCCLURE. I am sure you could not supply it off the top of your head, but I am also sure you have the figures.

[The information follows:]

UNITED STATES DEPARTMENT OF AGRICULTURE
SUPPLEMENTAL STATEMENT NO. 2 FOR THE HEARING RECORD
FIRE MANAGEMENT POLICY
September 29, 1988

QUESTION:

"Could you give me the statistics over the last two years in wilderness alone how many were treated as wildfires and how many as prescribed burns and the acreage of each class?"

ANSWER:

The following data are provided for wilderness areas in Regions 1 and 4. These two Regions have the most active wilderness prescribed fire programs and experienced wilderness prescribed fire problems during the 1988 season.

WILDFIRES AND PRESCRIBED FIRES IN WILDERNESS FOR THE YEARS 1987 AND 1988:

	1987		1988	
	Number	Acres	Number	Acres
Wildfires	89	75,499	318	575,768
Prescribed Fires	217	38,928	60	36,955*

---

* Acreage is from Region 4 only; data from Region 1 are not yet available.

WILDERNESS FIRE MANAGEMENT HISTORY, 1972-1988

	#Prescribed Natural Fires	Acres Burned	#That Became Wildfires	Acres Burned	#Wildfires Suppressed	Acres Burned
R-1	369	68,326	8	338,406	1,398	187,319
R-4	125	49,035	14	219,813	616	550,685
Total	494	117,361	22	558,218	2,014	738,004

NUMBERS OF FOREST SERVICE SEASONAL FIREFIGHTERS HIRED FOR THE YEARS 1982-1987:

1982 - 4,980
1983 - 5,155
1984 - 4,636
1985 - 5,158
1986 - 4,600
1987 - 5,112
1988 - Data not yet available

Senator MCCLURE. Secretary Dunlop, on page 8 of your statement are a couple of sentences that you repeated in your oral testimony, and I refer to the end of the first full paragraph on page 8. "In retrospect, we might have been more aggressive in suppression action."

Then you say, "Nevertheless, if immediate aggressive action had been taken on the five lightning-caused fires, it is questionable whether the attempt would have been successful. It is likely that the severe winds and burning conditions that subsequently followed would have made suppression of many of these fires difficult or impossible."

Certainly that is Monday morning quarterbacking like your critics, as well. The fact is if you had tried to suppress those fires, you would not be subject to the criticism you are when you did not and then they got out of hand.

Mr. DUNLOP. Yes, sir. I think that is correct. I think the point of that statement is just to acknowledge that we should have put the resources into fighting the fires immediately. However, people need to understand that our fire suppression forces still might have been overwhelmed.

Senator MCCLURE. I understand that. It was a very bad year, was it not?

Mr. DUNLOP. Yes.

Senator MCCLURE. I want to return to something I alluded to in my opening statement.

What were the conditions as you saw them, Secretary Hodel, or perhaps I should ask either Mr. Mott or Mr. Dabney. What were the conditions as they were seen at that time that led to the decision that these were not fires that should be suppressed?

Secretary HODEL. Senator, one of the things that we have under way is a complete detailed chronology of decisions that were made, conditions that were observed at the time the decisions were made and preceding that—recommendations and so forth.

If, when the documentation is complete, it supports the statements that have been made to me so far, it will show that in the area, the area of Yellowstone National Park, the conditions through May and June of this year did not vary significantly from what had been observed in the prior two or three years.

In the prior two or three years, there was a moisture condition that occurred during the spring that persisted throughout the summer. The result was that fires that occurred in those prior two or three years, lightning strike fires, did not get out of control, were not a problem and did not raise the alarm bells on the policy even though the statement the Chairman read earlier regarding the fuel potential there was known to people.

It was not until early July that those charged with the responsibility for applying the policies said we are getting a different situation here; something has to be done; we have dramatically higher winds and lower humidities than had been experienced in the past few years.

In other words, although the areas surrounding Yellowstone had suffered several years of drought, the summers at Yellowstone had not proven to be bad summers for fire in spite of that spring condition.

Now, if the documents that are produced are as good as the oral statements to me, that is presumably what they will show.

Senator MCCLURE. I have heard some of those oral statements, too, such as precipitation in the area was 200 percent of normal. I have an awful lot of trouble understanding that statement. You are going to have to convince me it is true.

Just as an example, perhaps I should not say you have had but I noticed you are in the midst of a series of exchanges with the governor of my state. The press report that comes out of Coeur d'Alene, Idaho includes a statement by the governor, the former Secretary of the Department of the Interior under the Carter Administration.

Secretary HODEL. I know him well.

Senator MCCLURE. You have met him, I think, as have I. The press report concludes with this quotation from his statement. "The simple fact is that anyone in the west over five years of age knows that you don't intentionally let fires burn in July and August, particularly when we have sustained days and days of record temperature and months and months of extreme drought conditions."

Secretary HODEL. That is not an uncharacteristic statement from the individual you are quoting, as you well know. It contains several distortions.

The reality is that the decision was made in mid-July that from that time forward all fires would be treated as wild fires in the Yellowstone area, so to refer to August is really totally irrelevant on his part but it beefs up his rhetoric.

Until we look at that record and see what the documented statistics are, we really cannot resolve this. I think it remains to be seen whether the documentation supports the representations made both to you and to me.

I think that it is not relevant for the Governor of Idaho to be referencing conditions in dry areas outside the park which have suffered drought and which we know have been susceptible to fires in prior years and applying those same standards to the park where in the past two to three years conditions have been similar all through the spring but this year we ran into very high winds and incredibly low humidities. All of a sudden, we had a situation vastly different than what had previously been encountered.

It is very easy for him to sit there and second-guess and potshot the decisions that were made by the people who were looking at the conditions as they arose. I am trying to resist that temptation also until I have had a chance to see that record, in all fairness, because clearly it is easier to sit here today and say the policy did not work or was not applied properly this year.

Senator MCCLURE. I noticed a member of the board of directors of the Greater Yellowstone Coalition is saying that these were record dry conditions. He is generally on the side of the Park Service and, I think, defending the Park Service even in the midst of having made that statement.

Secretary HODEL. I know your approach to these things is in the same fashion, but what needs to be done carefully when we have the chronology is that we need to see when in the chronology the

extraordinarily dry conditions in the greater Yellowstone area became visible.

It is entirely possible that they manifested themselves for a period of time, a week or two prior to the time the decision was made that we had a different situation on our hands. That could well be the case.

But again, subject to what I may see as compared to what I have been told, what I currently believe, Senator, is that the chronology will show that through the month of June there was reason to believe the situation in Yellowstone was not significantly different from what it had been in prior drought years when we did not have a fire problem. Time will tell.

Senator MCCLURE. I will wait to see that. When will you have that chronology done?

Secretary HODEL. I do not have a target date for that, but I would expect it will not be long. Several of the people who are involved in putting that together are still, in fact, involved in overseeing the completion of the fire season.

Senator MCCLURE. I realize that a particular area may be exempted from the general condition. If that is true, I want to see that borne out in the record.

But I think we all know that this was an extraordinarily dry year, the second or third in a row; that conditions going into this year were much worse than we had seen going into last year even.

Secretary HODEL. But what may well have lulled us into a false sense of security in the Yellowstone area is that while large areas of the west have suffered drought and unusually dry conditions for a series of years, Yellowstone had not reached the kind of conditions we had this year.

What will be interesting to see is the comparison of this year's records to prior years' records and to see whether we were lulled into a false sense of security because the conditions this spring paralleled prior years but then turned dramatically worse for us at the end of June.

Senator MCCLURE. The counties in Idaho adjacent to Yellowstone National Park were experiencing record drought conditions. I know that to be a fact. I do not know what the conditions were within Yellowstone National Park, and if indeed they are dramatically different just in that one area, the record will show that I assume.

Again, I am not trying to pin blame on individuals. I am trying to analyze a policy to determine what in the policy permitted us to get into this condition if there is some way we can modify the application of policy or fine tune the application of policy in such a way that we avoid a repetition.

Now, in the Forest Service last year we had a condition in Idaho. Again, a record dry year, not quite as bad as this year, and only the second of what has proven to be a 3-year cycle and what we hope to be the end, but we do not know. We had a prescribed burn, a burn allowed in a wilderness area that got out of control.

Last year, the Forest Service had just exactly the same problem. In dealing with one of those fires, they said we are going to let it burn, and then when they got into they said, oh, gosh, we are sorry we let it burn.

Now, somewhere in the combination of these circumstances, record dry conditions over the area, reservoir storages at 100 year lows, soil moisture lower than they have ever been recorded before in the history of taking those measurements in my area of the country, absolute crop failures, not just crop reductions but 85 to 100 percent crop losses in the areas immediately adjacent to the Yellowstone National Park area in my state. Then I am told that somehow we did not anticipate or did not see those conditions developing in Yellowstone National Park.

It is possible, Mr. Secretary. It is possible. In spite of the history that we had with the Park Service last year, however, we apparently did not really change much there, either. The buildup of these combustible materials, the standing dead timber, is not unfamiliar. We all knew that was happening. That has been happening for 15 years or more.

The Forest Service tried to harvest in the Targhee National Forest, tried to go in and harvest over mature dying lodgepole pine in the Island Park area. Recreation interests and summer cabin homeowners and summer recreationists said, oh, do not cut those beautiful trees. So the Forest Service, yielding to that pressure, cancelled timber sales in that area.

That did not keep the bugs from coming in. They did. The trees died. While they did not want clear cuts of beautiful trees, they had clear cuts of dead ones. The only difference really was instead of utilizing some economic value out of those, they were clearcut for firewood, and they were taken out to avoid precisely the condition that has occurred within Yellowstone. Maybe indeed we have to look at what we will do when we run not that predictable condition where you have an even aged timber stand of overmature timber that is now beginning to die and predictably will create the conditions that existed in Yellowstone this year when they finally coincided with weather conditions that ignited the bomb that was waiting to be ignited.

I do not think Yellowstone is going to be a problem next year. You have nothing left to burn. Is that a fair statement?

Secretary HODEL. First of all, about half of the forested areas have not been touched by fire this year.

Senator MCCLURE. Why were they not touched? Do we know? Was it because there was less dead timber there, less fuel on the floor?

Secretary HODEL. Perhaps I should ask Chief Ranger Dabney if he has any opinion on that.

Mr. DABNEY. Senator McClure, if you fly over Yellowstone you will see that the fire has been almost whimsical in some of the patterns it has left on the landscape. Some of the pictures that we passed around will show you that.

The winds that we have experienced will show you a long line, an elliptical line of unburned areas. Right next to that one may be a long line of various intensity of burn.

Senator MCCLURE. I have read in the press that we do not have to worry about it because we have some natural fire breaks there. They are already there. The fire this year created the fire breaks against next year's devastation.

Mr. DABNEY. In some cases that is going to be true. I thought that probably we were out of the fire business for a long time until I flew over it. As the Secretary just said, there is a tremendous amount of Yellowstone that has not been touched by fire.

Senator MCCLURE. Are you going to go back in and look at those areas and see what the potential is if we have another dry year like this one?

Mr. DABNEY. Sir, if I could I would like to talk just a second about lodgepole pine, especially in that high Yellowstone plateau. One of the questions that keeps coming back to us is why not burn more.

One of the problems in that kind of logic is that while there is a lot of material on the ground, most of it is big, and the only time that material will burn very successfully is when it is very, very dry.

If you say that we are not going to let any fire go in that kind of a system unless it is somewhat wet, then what we are in essence saying is that it will not burn.

Senator MCCLURE. You will have a lot of charred stuff on the forest floor that will last for 200 years.

Mr. DABNEY. Yes, sir, that is true; but the pattern and, indeed, the danger in an overmature lodgepole forest like that is when you get these very dry conditions and then get the ignition sources and get wind to put it in the canopy, you do not achieve a whole lot by having burned out the ground fuel.

Your concern in places like Grant Village and Old Faithful and, indeed, any of the other developed areas is for a running crown fire, a fire storm coming in. So you have to have a fire hot enough to burn those canopies out to do that. The only time that will work is when it is pretty dry and windy, and if you light a fire when it is pretty dry and windy, you are in the same condition we had this year. It is very difficult to control, especially in large remote areas.

Senator MCCLURE. You will also note by the photographs what you would expect, that there are some areas where the fire burned very hot, and it burned right down to the soil.

Mr. DABNEY. That is correct, sir.

Senator MCCLURE. It consumed everything that was there. Typically, a crown fire may leave a lot of standing dead.

Mr. DABNEY. As the Secretary pointed out, sir, that is true in some areas. It was very hot, but right next to it it may have just burned on the ground.

Senator MCCLURE. But those very hot fires are almost always where they are associated with heavy combustible materials that built up at the ground level. Is that not correct?

Mr. DABNEY. Sir, there is a lot of feeling on this issue. Certainly if there is a fire cycle in Yellowstone of 200 to 400 years, 100 years of fire suppression had an effect. It could not have helped but exacerbate what was going to happen anyway to some degree. But 100 years on a 200- or 300-year cycle is not extreme. You would have had some fuel buildup, but even without a huge fuel buildup this kind of situation concerns us.

It happened in your state in 1910, yours and Senator Melcher's State, where 3 million acres in a very similar situation blew up,

killed a lot of people, burned up a lot of country, and nobody could do anything about it.

Senator MCCLURE. It was not lodgepole in that instance.

Mr. DABNEY. Yes, sir, it was largely lodgepole.

Senator MCCLURE. Some was lodgepole. Some was the Climax Forest that almost starved Lewis and Clark when they went through in 1805 because there is not very much to eat in Climax Forest unless you are one of those tree boring insects.

Let me turn for just a moment to a very small but very important issue involved in all of this; that is, what do you do for those people, individuals, who are harmed.

Secretary Dunlop, on the back of your statement you included some attachments.

Mr. DUNLOP. Yes, sir.

Senator MCCLURE. Attachment number 3 includes on page 21 the drought disaster counties. Now, my understanding is that the drought disaster counties have little or no relationship to any designation or disaster relief as a result of the fires. Am I correct that it has to be a separate application for disaster relief?

Mr. DUNLOP. That is partly correct, Senator.

The Drought Disaster Bill that passed the Congress pertaining to farmers also includes a provision to make assistance loans available to businesspeople without any further designation.

But yes, to get the designation for farmers' home loans, physical loss loans, and other kinds of loans through the drought disaster, there would have to be a further designation. Damage assessment reports would then have to be filed by the governor's office to the Secretary, and that is under way right now.

Senator MCCLURE. I think as you are already aware, one operator in Idaho lost a band of sheep in one of these fires.

Mr. DUNLOP. Yes.

Senator MCCLURE. This was about a $160,000 loss, which by any test warps most sheep herders that I know about.

If I understand it correctly, unless that loss occurs in a county which has applied for disaster designation because of the fires, he cannot apply for relief. Am I correct?

Mr. DUNLOP. Senator, it gets pretty complicated because we have so many different agencies that deal with assistance.

For instance, I do not know exactly the circumstances of that man's loss, but——

Senator MCCLURE. The fire burned his sheep.

Mr. DUNLOP. Yes, but I mean the circumstances pertaining to what kind of claim he might have against the government. It may be that there could be some aspects of that claim that could be met directly and some assistance.

Senator MCCLURE. I think he would be awfully happy if he could get a disaster assistance loan.

Mr. DUNLOP. Yes. We will make every effort to——

Senator MCCLURE. You might just avoid a lawsuit against the United States Government if that were possible.

Mr. DUNLOP. That is right. What we have done is set up in each area for each fire a team composed of interdepartmental people, people that are not only USDA people but others. They are going to have a meeting in each of the areas and invite the public to

come, and they will discuss with them the types of assistance that are immediately available.

We will work with all of these people on an expedited basis to make sure that the assistance available through laws and statutes that have been passed is made available.

Senator MCCLURE. How quickly can we tell him he will find out?

Mr. DUNLOP. He could right now begin to make contact with our people. In fact, I think he already has. We have heard of this, so we are informed of it. So it would be in the immediate future.

Now, this is not something in our discretion. If under law his county has not been declared a drought disaster area, it may yet be because of the fire. The governor is making his damage assessment report for the county level basis.

Senator MCCLURE. Would the current drought disaster designation for a county be sufficient, or does it have to have a separate drought disaster or disaster designation?

Mr. DUNLOP. All of the above. It depends on what type of assistance the farmer would be seeking. If it pertains to ASCS type of assistance that comes for supplemental feed for animals, it is under one——

Senator MCCLURE. He has nothing to feed right now.

Mr. DUNLOP. If it is a farmers home loan, then he has to have a designation for his county. If it is a business loan under the Business and Industry provision under the Drought Disaster Bill for farmers that recently passed, the emergency drought bill, then this is already satisfactory.

So we will just have to deal with him and others on a case-by-case basis.

Senator MCCLURE. I understand, and I do not mean to take the time of the committee to look at an individual problem except I suspect what he is running into some others to some degree are also running into.

Mr. DUNLOP. Yes, sir. You are correct.

Senator MCCLURE. I do think that the circumstances of the loss are such that there ought to be something that can be done to help.

Thank you very much, Mr. Chairman.

Oh, one final question to both. Again, it is a relatively much smaller part of the total problem.

In fighting the fire you go in and typically use mechanical equipment to build fire lines. You will have in this year put a lot of fire lines in the wilderness area; is that not correct?

Mr. ROBERTSON. Yes, that is correct.

Senator MCCLURE. That leads to a secondary problem in how you manage what happened inside that wilderness area or in the park, because typically where the ground is disturbed by mechanical means you probably are also going to see a greater outbreak of noxious weeds; is that not correct?

Secretary HODEL. Ordinarily that is correct.

Senator MCCLURE. We would probably have an abnormal noxious weed problem associated with the fire lines constructed in fighting the fires.

Are we going to be able to go into those wilderness and park areas where appropriate to fight noxious weeds?

Mr. ROBERTSON. Yes. In the case of the Forest Service, I believe we can do that in wilderness.

Senator MCCLURE. What funding will that come from? Is that directly in the fire cost, or is that going to come out of your regular budget?

Mr. ROBERTSON. If it is emergency work directly related to the fire, we can do it out of fire money.

Senator MCCLURE. Is the abnormal growth of noxious weeds in an area——

Mr. ROBERTSON. It probably will not be classified as emergency work, so it would probably come out of our noxious weed money.

Senator MCCLURE. You may need a supplemental?

Mr. ROBERTSON. I have not yet looked at that.

Senator MCCLURE. Thank you. I hope you will.

Thank you, Mr. Chairman.

Senator MELCHER. Senator Wallop.

Senator WALLOP. Thank you, Mr. Chairman.

This chronology is going to be interesting.

Don, when I called you on Sunday morning, I believe it was July 23, whatever that Sunday was, you expressed surprise and assured me on Monday morning that as of then the policy was changed. I guess that precise moment is not so important. Before you went out you gave me a quote that it had been changed and I could quote you on that.

What is important is that nobody ever believed it. Nobody ever believed it because the statements had kept coming out and behavior kept emerging from the Park Service and, indeed, the Forest Service there, if you will. After it had been changed it was still being defended.

You get stories, one on August 23 in the Casper Tribune which was after the big blowup. Park spokesman Michelle Rotter said the park is once more bringing in a class one overhead team, the most highly skilled group of fire managers, to direct the firefighting of the Clovermist fire.

Two weeks ago, the Unified Area Command, National Park Service/U.S. Forest Service team—that is why I think it is both—coordinated management of all fire and dismissed the class one team. It was managing the fire and returned the fire to park supervision.

When the previous class one team was dismissed, then Incident Commander Curtis Bates said he did not feel good about leaving a fire that had not been totally contained.

Director Mott, you continued even in September, September 1, defending the policy after it had been stated that it was changed.

Regardless of what took place on the ground, I can tell you what took place in the minds of people in Wyoming; that was, people were not fighting the fires.

Now, I have a question here and I am not trying to single out anybody, but on August 28 in the Denver Post, Mr. Dispane was quoted as saying, "Burn, baby, burn."

Did that actually happen? Is that what he said?

Mr. MOTT. That quotation came about by this process. Our scientist was out in the field with the Denver Post reporter, and he had staked out an area where he could determine what the effects of the fire would be. The fire was some miles away, and the fire was

approaching this area where he was going to do his research and had already done research on that particular area.

So as the fire approached this area, he in jest said, "Burn, baby, burn", and he was talking about that specific area that he wanted to do research on after the fire went through so that he would have some base data to work on for future fire policies and things of that sort.

He was not talking about the entire park. He was talking about this specific area in which he was doing the work.

Now, it is unfortunate that he made that kind of a statement. We are sorry about it, but that was not something that—he is a very serious person and very concerned about this and was doing this kind of base research work.

Senator WALLOP. In all fairness, all of us are very serious people when it comes to Yellowstone Park. That is not the only quote in there, I would just say.

He says, "In 1981 we had a good year. We burned 20,000 acres." Then he goes on to say, "I don't like suppression efforts."

Now, I am not picking on him, and I do not mean this to be an assault on him. I am telling you what happened in the minds of people that surrounded that park when they saw things like this day after day, including your September 1 visit in which you expressed surprise at the damage.

The people simply did not believe there was a full-scale effort, and the more that happened, the more they called for a full-scale effort.

In a way, it hampered firefighting efforts, being accused of not being full scale.

So if one thing comes out in a change of policy, and that is what I pleaded for in my opening remarks, is that maybe we would get a little consistency coming out of the various spokesmen and commentaries, because it really hurt. It really hurt badly. It hurt you. It hurt the mood and the understanding of Wyoming.

I have to be honest with you. I am not still persuaded that in all instances because they talk about the overhead team being dismissed and then called back in that in fact there was an enthusiastic response time to your order that it change.

Secretary HODEL. Senator, certainly I do not think there is any doubt that the statements of people on the fire line and crews that had come and gone that were quoted in the press had an effect on the people in the area as far as their confidence that the fire was being fought or that it was being fought competently.

We did not attempt—and I do not think we could have successfully done so if we had even thought of it, we did not think of it—to muzzle anybody. The net result is that all 9,000 people on that fire line were fair game for comments about how the fire was being fought.

I liken it to asking a soldier in a foxhole in a war as to whether or not he thinks the generals are conducting the war successfully or effectively.

Senator WALLOP. I studiously avoided all 9,000 people. I picked specific events, dismissal of the class one team and specific quotes from the director and specific quotes from other people. I know what you said about the rumors and all 9,000 people.

Secretary HODEL. The point I am making is, however, that the only quotes that undercut or raise the alarm or raise the concern are from the handful of people we read about in these articles or see interviewed on television who have something critical to say about the process or, in this case, I think the "burn, baby, burn" statement in a different context would not have been quite as inflammatory as it was.

Senator WALLOP. Forget "burn, baby, burn" for a minute. Take the statement that "I do not like suppression" at the moment and time when you had said there should be full-scale suppression. That is the kind of thing that undercuts.

Secretary HODEL. As you well know, there are paid professional representatives of major environmental organizations today who are saying that this policy was a success.

Senator WALLOP. They live in Georgetown and other places and did not smell that all summer.

Secretary HODEL. It may well be, but none of them are obviously——

Senator WALLOP. They did not lose outfitting camps, and they did not lose a lot of other things.

Secretary HODEL. Mr. Wallop, none of them have testified here today, but we are reading their comments in the paper, and they will be heard quite appropriately in the course of the review of the policy. The fact is we have professionals on our staff and will always have professionals on our staff who focus narrowly on what their area of concern is and either do not know or do not care about the public reaction to references that they may make. I think that is what we are up against in this case.

Senator MELCHER. Malcolm, will you yield a moment? There is a follow-up question that ought to be asked right now by me.

In the fire chronology and strategies that was provided to me on Monday of this week, on August 2 Superintendent Barbee met with Area Command and Incident Commanders to review fire behavior projections and fire strategy alternatives. The estimate at that time was $40 million to carry out full suppression and $20 million to carry out a containment strategy.

The decision was made to carry out a containment strategy rather than full control.

Are you aware of this, Mr. Secretary?

Secretary HODEL. No, that is news to me.

Senator MELCHER. This is what the Park Service provided to me on Monday.

Secretary HODEL. Your sources are better than mine, Mr. Chairman.

Senator MELCHER. I do not think we have to go to anybody outside. I think this decision said that something that costs $40 million for full suppression would not be used and that containment, whatever they meant by containment strategy, that would cost $20 million was the preferred one and the one decided upon on August 2. So this type of decision should be explained.

Mr. DABNEY. Mr. Chairman, is that referring to the North Fork fire, and would that have been late July, early August?

Senator MELCHER. It is August 2, and the chronology does not really make it very clear. It gives a series of dates, one week, July

24 to July 30 and then July 30 to August 2, which is not a full week, and then goes to this August 2 notation about the meeting of Superintendent Barbee with the Area Command and Incident Commanders.

Secretary HODEL. Do you have a page number, Senator?

Senator MELCHER. 20.

Mr. DABNEY. What document is it?

Senator MELCHER. It is entitled National Park Service, and that is all. "The Fire Management Policy for the National Park Service since the 1930s" is the lead on page 10. I do not have the cover right here.

Mr. DABNEY. Sir, there were a number of those meetings throughout the entire event. I recall reading what you are talking about, and I am almost positive they are talking about the North Fork fire.

What they were talking about was to try it at that time, which they found out later or very soon after that it was not going to be a viable option anyway. The pictures that the Secretary passed around earlier are mostly of the North Fork fire. The two pictures that show that fire jumping the half mile distance from the top of that precipice there across the Madison River, all of those meadows, the road and spotting along the way made it very clear that full control of that fire was, in fact, not an option.

They were talking at first without that information. They looked at it. They said, okay, we will try to do conventional firefighting tactics, and line that fire. To try to do that completely would cost us $40 million, I think you said.

To try to contain it, which means keep it out of, in this case, West Yellowstone, Montana, to keep it away from Old Faithful, and to keep it away from the developed areas, they could take a modified suppression or containment action which would at least try to keep that from those areas.

But to try to completely secure that fire at that point in time on August 2 to the point that they thought they could stop the fire dead in its tracks would have cost them $40 million. In reality, we know now it could not have been done anyway. Those pictures show you what they were facing. Every time one of those wind events came up, it completely obliterated our lines. That same report I think will show you that at about the same time they had that discussion that of the 400 miles of fire line within the Yellowstone Park, only 20 of them held.

That was strictly a planning session talking about options, sir.

Senator MELCHER. It was August 2, and I do not know what stage the North Fork fire was on August 2.

So regardless of whether it was that fire or a group of fires, it still is pertinent to say was what Secretary Hodel wanted done being done, because the notation here is that the estimate was made to carry out full suppression as compared to a containment strategy.

Secretary HODEL. Senator, this is why I think it really is imperative that before we try to pin down a precise answer to the kind of question you are asking that we have that chronology with the details, not just this one but a complete one including other events

that are of concern and raise questions. We do not have that before us.

I am satisfied from the responses I have gotten from the people on the fire lines—who by the way were not National Park Service people alone. This was a coordinated effort. Every fire had a fire team, an incident commander. You had Forest Service people, National Park Service people, BLM, BIA, and you could not tell who they worked for. They all wore the same color jackets, the yellow firefighter jackets. One incident commander was responsible, but he had a team of people he referred to who represented all of the agencies.

I am satisfied from the responses I got from them that they were doing everything that they thought was likely to have an effect on holding those fires down, stopping them, to the best of their ability.

When I was there in July we were well under 100,000 acres that had been touched by fire at that time. When I went back on September 10 we were in the 800,000-acre range, and it continued for a few days beyond that even though we got an improvement in the weather.

I am satisfied from what they were telling me they were making the best decisions that they felt they could make. These were experienced firefighting directors, fire bosses.

Now, everybody on the fire line can have his own opinion, and I know that the people who live around the park, having read the things that Senator Wallop has identified and having this conviction that in their hearts the National Park Service did not want to fight the fire, they were convinced that not everything was being done. But I really believe that reasonable efforts were being undertaken.

It would be easy for us now to say, and we will undoubtedly have this opportunity to go back with that chronology, "Ah, but on August 2 you should have known and you should have thrown the $40 million into the fighting of the fire" even if it would not have done any good.

Senator WALLOP. I need to reclaim my time because we have a vote on, and I suspect that that may be all we are doing.

I think the point is clear enough that there are sufficient interruptions in the clarity of the policy that people feel well justified in seeking to be persuaded that what you asked to have happen actually was happening. I know I feel well justified. I think we will just wait and see that and not prejudge it now.

Secretary HODEL. That is fair.

Senator WALLOP. Let me ask you this. After your latest trip to the park in September, the press reported that you called the let burn policy a disaster.

Could you elaborate on that statement and what needs to be done?

Secretary HODEL. I took a look at the park. I drove in from West Yellowstone and got to Old Faithful Inn. I drove most of that way on a road lined by charred land on both sides, and my reaction is that is a disaster to what you and I have known as Yellowstone National Park.

I referenced the policy. What I said is I think it is very hard for me to argue. I would not argue that the policy has been a success. I

think this year it did not work, and that is why we have a team, Secretary Lyng and I, to come back and tell us how it needs to be changed to try to reduce the opportunity of this kind of thing ever happening again. I would expect that we will see some recommendations along that line.

The disaster is that it placed us in a position where we have spent $100 million, we have had thousands of people on the fire line, and we did not know for days on end if we were going to be able to save Old Faithful Inn or Canyon Village or Grant Village, and we thought for a while Mammoth was in jeopardy. Certainly Silver Gate and Cooke City and West Yellowstone were all jeopardized at one time or another.

What I have described is a policy that has not worked. It did not work this year, is what I should say. It needs to be revised.

Senator WALLOP. One thing else that concerns me is about the coordination between the land managing agencies, the Park Service, the Forest Service, BLM, although this year in that area that was not much engaged with regard to these fire management policies.

You have five forests surrounding Yellowstone Park. Each of them has potentially a different fire description from the other as well as the park. Then you have these kind of crazy responses.

When I was up there in early August, the fire was moving out of Yellowstone Park into the adjacent forest, but the forest declared that it would not accept the park's fire. [Laughter.]

Senator WALLOP. It is hard for a civilian to understand that. If this is indeed a natural forest, how can you not accept it, and what do you do if you do not?

Secretary HODEL. We thought it was a wise policy decision on their part not to accept that. [Laughter.]

Secretary HODEL. Actually, I think the technical meaning of that is where the fire is crossing a political boundary, or a jurisdictional boundary in this case, the jurisdiction into which it is going—the forest in this case—said.

Do not let that fire escape your boundary and come onto us. Take all actions including mechanized systems to try to prevent it from leaving the park.

Well, of course, what we all now know is that it was not within anybody's ability to stop that fire.

Senator WALLOP. Mr. Chairman, I will have some questions prepared, but let me ask you this one last question, and I would like to ask both the Park and the Forest Service, regarding reforestation and rehabilitation.

Let me start with you, Dale. Do you believe the best policy to follow is to let the natural reforestation occur, or do you intend to pursue a planting program?

Mr. ROBERTSON. In the wilderness areas we plan to go in and do some seeding on the sensitive areas and areas that we think need some help quicker than the natural revegetation.

We had some fires, particularly the Clovermist fire over on the Shoshones, outside of wilderness. We will go in there and do reforestation and get that back in shape as quickly as we can.

Senator WALLOP. Mr. Secretary, is this early?

Secretary HODEL. I should ask Director Mott to respond as to what the National Park Service reaction will be.

Mr. MOTT. We have already made seed counts to determine the amount of seed that will be available after the fire goes through. On those areas where we had severe burn, we counted 50,000 seeds per acre. That is about one seed per square foot.

On those areas where the burn was not hot, we went through the area and we counted 1 million seeds per acre. So we do not need seed to regenerate a lodgepole forest in Yellowstone.

However, along the roads, along the rivers where there may be erosion and in other areas that will be next to generally developed areas, we will be using native grass seeds to reseed the area, and we will be using wildflowers native to the area to reseed the areas and in some cases actually using artificial means to prevent any erosion from causing problems insofar as the trout streams are concerned in Yellowstone.

Senator WALLOP. I might just say that I have seen recently a report with regard to Mount St. Helen, and those areas that have been reforested are said to be 35 years ahead of those areas which are allowed naturally to recover.

So I would hope that in the advancing of the rehabilitation of the Park that you take that into consideration. As others say, you have several purposes, and it is not entirely its purpose to be exclusively a biological laboratory. It does have the purpose of providing pleasure for the American people.

Mr. MOTT. We are assuming that this committee of technicians who are going to be studying not only the policy will indicate to us whether we need to do something more than just natural regeneration, and we are prepared to handle that kind of a situation. But I think we need to wait for their advice and their recommendations.

Senator WALLOP. Has there been a prescribed burn in Yellowstone in the last decade?

Mr. MOTT. No, there has not, and part of the reason for that is although we do prescribe burning in other areas, the normal situation in Yellowstone in the lodgepole forest is that in order to do a prescribed burn we need to have dry weather and some wind to keep the fire moving.

The problem is that under those conditions we can get crowning, and then we have a serious problem on our hands. It is not like a normal area on the western forests where we can do prescribed burning during the summer months and we can find the right temperature and the right wind conditions and be sure of what we are doing.

Senator WALLOP. What happens if a loco human goes by and happens to start a fire in a place that is a good place to have a fire? Why would you put that one out and wait for lightning?

I guess I have a hard time finding any consistency in this policy. If there is such a thing as prescribed areas to burn which you want to contain, why if you had one in an advantageous place would you simply put it out on the basis that man did it, if there is such a plan as you have described?

Mr. MOTT. I think I can put this into perspective.

Senator WALLOP. It will have to be a short perspective.

Mr. MOTT. From 1972 to the present time, we had 503 fires started in Yellowstone. Of those 369 were from lightning, and 134 were from human. Those fires under the conditions that we have in Yellowstone burned 35,978 acres or burned through that much.

Senator WALLOP. I am just asking you what is unnatural about man?

Mr. MOTT. What is unnatural about man?

Senator WALLOP. Yes. If there is a fire planned and an unnatural man starts an unnatural fire as it is described in this thing in the right place, why would you put it out if it is going to be in part of a fire plan?

What the hell is wrong with the circumstance?

We have a 4-minute vote.

All I am just telling you is that if there is a conscious fire policy and a fire starts by whatever means in the appropriate place, it probably is appropriate to let that go, is it not?

Mr. DABNEY. Sir, lightning is the primary cause of fires. Lightning only occurs at——

Senator MELCHER. May I interrupt here?

Senator WALLOP. I know you have lost direction of my question. I know there are all kinds of natural things that start it, and I understand that.

The second part of it is you have this fire plan, so if a fire starts by whatever reason within the fire plan, why would you put it out in one case and let it burn in another?

Mr. DABNEY. Wrong place, wrong time.

Senator WALLOP. I am talking about the right place. You say you have a place where it is supposed to burn.

Senator MELCHER. I hate to interrupt this dialogue, but we have only three minutes left.

I want to thank you all for being here. We have asked a number of questions, and we will submit more questions. We would like to have you answer those.

I want to tell you that both committees will keep in contact with you as you develop your policy. Thank you very much.

[Whereupon, at 4:35 p.m. the hearing was adjourned.]

APPENDIXES

APPENDIX I

Responses to Additional Questions

United States Department of the Interior

OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20240

JAN 18 1989

Honorable Dale Bumpers
Chairman, Subcommittee on Public Lands,
National Parks, and Forests
Committee on Energy and Natural Resources
United States Senate
Washington D.C., 20510-6150

Dear Mr. Chairman:

Enclosed are responses to questions that you submitted to Secretary Hodel as a result of the hearing held on September 29, 1988.

Sincerely,

Philip G. Kiko
Legislative Counsel

Enclosure

Q: The briefing materials sent to me from the Park Service included a chronology which stated that on August 2, the "(d)ecision was made to carry out a containment strategy, rather than full control," on the Yellowstone fires. Could you draw a distinction for us between "containment" and "full control" and tell us when, if ever, the Park Service moved to "full control" of these fires?

A: Both containment and control are accepted fire suppression strategies which are employed on wildfires depending on fire behavior conditions. The definitions of these strategies are relative and general as opposed to absolute distinctions between approaches. Containment refers to establishing, or attempting to establish, a fireline around a fire. Control implies a more intensive and direct effort, including extinguishment of a substantial portion of the fire within a containment line. Full control of the high intensity fires at Yellowstone NP was not possible until September 11, when weather conditions changed, making direct attack feasible.

Q: The Park Service has prepared a document entitled "Fire Behavior Overview," Which outlines many of the causes of the recent fires in the Greater Yellowstone Area. The report states that "90 percent of the Greater Yellowstone Area is dominated by forested fuels categorized as 'old' and mature...Fuel quantities and fire potential become predictably (emphasis added) high as pine stands become overmature...It is this heavy snag fuel loading, both standing and on the ground, in combination with the very flammable subalpine fire, that fueled so many high intensity fire runs in 1988." Given that the fuel buildup was evident, and the possibility of an explosive situation was very real, should more aggressive action have been taken to put the original fires out earlier?

A: Fire history studies for lodgepole forests in the Yellowstone area indicate that the fire pattern consists of numerous smaller fires (several thousand acres or less) with occasional major fires at a frequency of 300 - 400 years during extreme weather conditions. Since fire control using modern fire-fighting tools and tactics has only been possible in this region for the last 30 - 40 years, the fuel build-up which has occurred has not resulted in abnormally heavy fuel accumulations.

Q: Would policies have allowed you to take a more aggressive role in suppressing fires if there was a demonstrated threat to safety, personal property and the resources of the park?

A: The existing policies require that action be taken to protect life and property from all fires.

Q: The Park Service's "Wildland Fire Management" Manual describes the use of "prescribed fires", both those occurring naturally and those ignited for management purposes by park employees. The guidelines state that one of the objectives of prescribed fires is the "control of hazard fuels." Hazard fuels are defined as those that can be altered, removed or significantly reduced in order to avoid dangerous or undesirable results if these fuels are ignited, by any means, at an inappropriate time. Given the build-up over almost 100 years of fire suppression on the park, were any efforts made prior to this summer to reduce the fuel through prescribed burning or other means as encouraged by your policies?

A: As previously stated, the interval of effective fire control in the Yellowstone area was far less than 100 years. Further, although the approved version of the Yellowstone National Park fire management plan calls for prescribed burning to reduce hazardous fuels in developed areas and along park boundaries, there are no accepted prescriptions for conducting prescribed burning in mature lodgepole fuels. This type of forest only burns in high-intensity, crown fires under extreme weather conditions. Even if such a program were technically possible, it would require an annual burning program of thousands of acres which would be expensive to implement and result in perennial smoke impacts to both park visitors and surrounding communities. Hazardous fuel reduction by mechanical means has also not been an element of the Yellowstone National Park fire management program in the past. As a result of last summer's fire activity, new methods for hazardous fuel reduction in mature lodgepole pine forests are being developed.

Q: Are there any other parks which are in imminent danger because of high buildup of fuel?

A: Yes. Other parks with significant hazardous fuels have been identified. To the extent possible, mitigation programs are underway in those areas.

Q: The Forest Service has outlined specific rehabilitation that they will do as a result of the fires. What rehabilitation will the Park Service undertake? What kind of rehabilitation is allowed by your current policies?

A: Rehabilitation of wildfires in national parks primarily focuses upon the impacts of suppression actions, such as firelines, helispots and campsites. Because fire is a natural process, such actions as seeding generally create more unnatural conditions and tend to retard revegetation by natural species. The Service has taken some erosion control steps in the most highly susceptible soil types and permitted seeding with specified grass species along park boundaries. Further rehabilitation, other than of developed facilities and trails, is not anticipated at this time.

Q: Do you support the present policies of the Park Service regarding fire management? Do they give you enough flexibility to meet the management objectives of the park as well as protect the surrounding communities?

A: The Service's management policies provide adequate flexibility for park managers to attain park resource objectives, up until the point that threats to adjacent communities are identified. At that point, the protection of life and property takes precedence over the resource objectives of the park. The NPS plans to review and revise NPS-18 in accord with recommendations under development by the interagency fire policy review team. The NPS will also conduct a detailed review of all fire management plans to ensure they are in full conformance with the provisions of NPS-18.

Q: According to the Fire Management guidelines included in the Park Service's Management Policies manual, a distinction is made between "management fires" and "wildfires" -- management fires being those which contribute to the attainment of the management objectives of a park, and wildfires being any fires not classified as management fires. Were some of the fires in the Yellowstone area originally classed as "management fires"? If yes, when were they reclassified as wildfires? When they were reclassified, were they then immediately suppressed?

A: Several of the fires in Yellowstone National Park this summer were originally classified as prescribed natural fires, formerly called "management fires." Beginning on July 17, prescribed natural fires were reclassified as wildfires and suppression action was initiated. By July 21, overhead teams had been established to fight most of the fires in the park. While several fires which started as late as early August were originally misclassified as prescribed natural fires, review of the fire records reveal that they were fought from ignition under a confine or contain strategy.

Q: According to the Fire Management guidelines included in the Park Service's Management Policies manual, a distinction is made between "management fires" and "wildfires" -- management fires being those which contribute to the attainment of the management objectives of a park, and wildfires being any fires not classified as management fires. Were some of the fires in the Yellowstone area originally classed as "management fires"? If yes, when were they reclassified as wildfires? When they were reclassified, were they then immediately suppressed?

A: Several of the fires in Yellowstone National Park this summer were originally classified as prescribed natural fires, formerly called "management fires." They were reclassified on July 21, 1988. The suppression action on each of the fires was governed by the escaped fire situation analysis completed daily by the fire management team in concert with the line officers involved. They strove to minimize acreage burned, threats to developments, and escape from the park commensurate with firefighter safety.

Q: According to Director Mott, one of four basic goals of the Park Service is to resort to prescribed burning when and where necessary to reduce hazardous fuels (fuels which are primarily dead and down trees). Why was that goal not attained in Yellowstone? What is the most effective way to reduce hazardous fuel reduction if prescribed burning doesn't work? Has such a method been used in Yellowstone and, if not, why not?

A: Mechanical removal of fuels is the most viable alternative to prescribed burning for hazardous fuel reduction. This type of program is particularly labor intensive and costly to implement in remote, roadless areas such as Yellowstone National Park. A mechanical removal program would more likely be successful on a limited scale such as in the vicinity of park developed areas. More research and analysis is required to determine the proper application of both prescribed fire and mechanical solutions for reducing hazardous fuels in Northern Rocky Mountain lodgepole forests.

93-715 O - 89 - 4

Q: Director Mott, in your August 11th letter you stated that since 1972 lightning caused fires have been allowed to burn under certain conditions but that man-caused fires have been suppressed. I understand that man-caused fires tend to be around developed areas and so will often be suppressed for that reason, but what accounts for such a blanket policy, especially in light of the fact that the Park System policy favors prescribed burns? Why is it termed to be "damage" if its a man-caused fire?

A: There is a potential to significantly alter the vegetative cover of the national parks by human-caused wildfires. Millions of visitors constitute an ever-increasing threat of those wildfires and hence risk to the park resources. The timing and location of human-caused wildfires do not generally coincide with those caused by lightning. Damage and adverse impacts are used interchangeably; however, damage is a more easily understood term to characterize the results of wildfire.

Q: How much does your agency spend per year in pre-suppression activities? What are the specific activities accomplished by presuppression programs? What was accomplished at Yellowstone?

A: The National Park Service spent $5.05 million in fiscal year 1988 for presuppression preparedness. Typical activities include employment of seasonal fire personnel, training, aircraft availability, and equipment maintenance and operations. In 1988, Yellowstone National Park had a presuppression program of $152,000. Those funds were used to hire approximately fifteen temporary positions and purchase limited supplies and materials. Programs accomplished by these temporary employees included weather monitoring, dispatch, staffing fire towers, maintenance of fire caches, fire behavior monitoring, fire suppression and helitach operations.

Q: Has the Park Service ever submitted a budget request for pre-suppression activities? If not, why not?

A: The National Park Service has used its normal fire year programming process, FIREPRO, to define its presuppression needs since fiscal 1983. These expenses have been covered by supplemental appropriations, as approved by the Department of the Interior.

Q: The fires in and around Yellowstone have been described as constituting a major natural disaster. How does the fire season in Yellowstone compare in scope with past fire seasons?

A: It is the most extensive and intense fire season in the 110-year history of the park.

Q: America spends tremendous amount of money on fighting fires each year. $100 million has already been expended in the Yellowstone area alone -- and that is a conservative estimate. Is there any way to decrease the cost of fighting fires and increase the success of protecting developed areas prior to a fire's occurrence?

A: There are 2 basic tactics to decrease suppression costs and increase the probability of success. The first is a good presuppression program to provide resources and preparedness. The second is discrete application of hazard fuels reduction, minimizing the intensity of any fire that should materialize.

Q: Counties surrounding the park were starting to request drought assistance relief in June of this year and volunteer fire departments in the area were already practicing their skills and honing their response time in the early part of June. Yet even in July we saw agencies clinging to a "Let Burn" policy as though this was a normal fire season. When everyone in the area had the foresight and common sense to know when dangerous situations were in existence, how is it that trained professionals failed to recognize the situation?

A: The severity of a fire season is dependent upon weather conditions preceding and during that season. The long term drought predisposed that region to potentially more severe wildland fire behavior. However, above normal precipitation on a localized basis in April and May mitigated that potential early in the season. The virtual absence of precipitation in June, July and August subsequently compounded the effect of the underlying drought. This may be a case of being too aware of details, such as the early rains, and not adequately factoring in long term drought.

Q: Do you see a need for better forecasting capabilities? Please explain.

A: An interagency effort is already underway to better incorporate indicators of long term drought into seasonal fire severity forecasts. The real time forecasting by National Weather Service fire weather forecasters was very good on the fires of 1988.

Q: Regarding reforestation, do you believe the best policy to follow is to let natural reforestation occur or do you intend to actively pursue a planting program.

A: There is no need for general artificial reforestation on areas managed as natural, such as parks and wilderness. Their mandated purpose is to perpetuate natural species and processes. In those geographic regions subject to lightning fires the species are already adapted to respond after fires. Many species thrive on early post-fire sites such as the berry patches, vital to certain species of wildlife. When commercial forests or private lands are impacted by wildfire, then reforestation would be appropriate to restore those values.

Q: What are the advantages or disadvantages of either policy?

A: Advantages of the policy to allow for natural reforestation are 1) this policy allows us to meet our mandate for perpetuating natural species and processes 2) it is cost effective to allow indigenous species which are adapted to fire to naturally revegetate an area rather than planting commercially obtained stock which may be more susceptible to disease, 3) research has shown that post fire artificial planting programs can actually impede natural vegetation recovery and 4) artificial reforestation increases the likelihood of the introduction of exotic species.

Q: Concerning the recovery and rehabilitation efforts in Yellowstone and the surrounding areas, do you see a need for legislation of any type in order to achieve your objectives?

A: The Recovery Plan for Yellowstone, Grand Teton and Glacier National Parks defines the desired activities. Some specific funding may be needed, but specific legislation does not appear necessary.

Q: The gateway communities in Wyoming, Montana and Idaho which depend on the Yellowstone National Park as a tourist attraction for a major source of revenue have been financially devastated by the fires in Yellowstone. They are now trying to pick up the pieces and promote the park for the winter tourist season. What financial resources do you have available to assist them and how soon could those funds be made available?

A: A specific effort has been made to address these needs with the Yellowstone, Grand Teton and Glacier National Parks Recovery Plan. While the National Park Service is not authorized to provide funding to local businesses and communities, a number of actions are being undertaken by the National Park Service to promote increased visitation to the region in the future. These actions include: establishment of additional positions at the park level to work on tourist promotion projects jointly with the surrounding states, travel to national and international travel/trade shows to accurately explain the 1988 Yellowstone fire season, and development of a free brochure and display for use at national and international travel events.

Q: Could you explain the cooperative venture you are now working on with other Federal Agencies?

A: The Secretaries of Interior and Agriculture jointly established a team to review fire management policies in National Park Service areas and in Federally designated wilderness areas. The recommendations of that team were published in the Federal Register on December 20, 1988. In February, 11 public meetings will be held throughout the country to solicit input on these recommendations. Necessary policy changes identified by this process will be put in place by the beginning of the Western fire season in 1989.

APPENDIX II

Additional Material Submitted for the Record

Founded 1875

AMERICAN FORESTRY ASSOCIATION
balanced forest use

Mailing Address
P.O. Box 2000
Washington, D.C. 20013

1516 P Street, N.W.
Washington, D.C. 20005

telephone (202) 667-3300

September 26, 1988

For more information contact Gerald Gray

An AFA Policy Paper

AMENDING THE LET-BURN POLICY ON PUBLIC FOREST LANDS

The 1988 fire season has been one of the worst in modern U.S. history. Over 4 million acres have burned in the western states, and the toll continues to rise. Fire suppression costs alone have run into the hundreds of millions of dollars. Losses in humen lives, property and resource values have been high, and the impacts on regional and local economies are virtually inestimable.

The Yellowstone fires, which burned more than 1.5 million acres of our nation's oldest national park, have captured the attention of the American public. Wildfire policy is receiving greater scrutiny than it has for years, and Congressional review and reaction is assured.

The Park Service has come under attack for its "let-burn" policy, which some perceive to have contributed significantly to the conflagrations. Adopted by the Park Service in 1968, and introduced into Yellowstone in 1972, this policy basically allows for natural (i.e. lightning) fires to run their course, if they pose no threat to human life or property within, or adjacent to, the park. Over the last 16 years, more than 300 lightning fires have been allowed to burn themselves out, of which 80 percent were less than an acre an size. In total, these fires burned only 30,000 acres. This year, however, the policy was a prescription for disaster.

If the Yellowstone fires, and fire policy, are debated in a heated political environment, the let-burn policy could become a victim of harsh reaction. The American Forestry Association believes this would be a mistake. The policy has been forged through years of debate by natural resource professionals. It seeks two basic objectives: 1) to permit fires to play, as nearly as possible, their natural, ecological role, and 2) to reduce to an acceptable level the risks, and potential consequences, of wildfire within, or escaping from a park. We believe these underlying principles are still viable for wildfire management in our National Parks and Wilderness Areas.

However, we also think the policy needs some significant adjustments. It must take into account evolving social and environmental realities, such as the increasing presence of people in and around our parks and wilderness areas, and our changing global climate. We believe the policy should allow for more direct management of the fuels in these forest ecosystems, and encourage the creation of a mosaic pattern of forest age-classes. These are needed to reduce the potential risks posed by natural

and man-caused wildfires. Furthermore, we feel the policy's proper application needs to be more clearly specified for particular resource conditions. Better guidelines are needed to determine whether, when and how to attack natural fires. Without improved guidelines, we may repeat the confusion, and ensuing disaster, that occurred in Yellowstone.

In retrospect, it appears Park Service officials in Yellowstone demonstrated poor judgement by not attacking several lightning fires sooner, and not permitting greater use of bulldozers and helicopters for firefighting. But even if they had, the fires still might have raged out of control. The highly unusual weather conditions and extreme winds produced fires that might have overcome any initial attack or amount of heavy equipment.

Western forests were like a tinderbox this year. The drought of 1988, coming on the heels of the 1987 drought, entailed explosive conditions. Moisture content in the forest fuels (i.e. deadwood, shrubs and debris) was recorded as low as 2 percent. In a normal summer, such fuels would have had a moisture content between 10 and 15 percent. Conditions this year were so far from the norm that they were off-the-charts used by the fire community to record the level of fire danger.

Exacerbating the situation was the accumulation of fuels resulting from more than 80 years of total fire suppression, from 1886 until the late 1960's. Though intended to protect resource values and permit forest ecosystems to pursue their natural cycles, this strict fire suppression policy, ironically, created unnatural forest conditions. The heavy fuel accumulations, generated hotter fires that easily escalated into crown fires, becoming more destructive and uncontrollable.

Fire's natural role in the forest ecosystem is one of managing fuels, by burning mature, less vigorous stands, returning nutrients to the soils, and providing for the regeneration of young, thrifty forest stands. Historically, fires created a mosaic of forest age-classes which, in effect, provided natural firebreaks, thus limiting the size and severity of wildfires. The mosaic pattern also promoted biodiversity by providing a wide range of habitats for plant and animal species. The American Forestry Association believes this is the appropriate role for fires today.

The let-burn policy debates that began in the 1960's recognized the increasingly dangerous fire conditions developing in our National Parks and Wilderness Areas. Though the policy's ostensible objective was to allow fires to play their natural role while minimizing risks to human life and property, an underlying concern was to reduce the unnatural build-up of fuels that had been occurring. The policy therefore allowed for "planned ignitions" in let-burn zones. These could be either lightning fires or prescribed burns set by the Park Service or Forest Service. While some parks such as the Everglades in Florida and Sequoia in California adopted prescribed burning as a management tool, Yellowstone chose to use only natural fires. This provided little opportunity for managing fuels by planning where and when to start fires.

From a regional perspective, the interspersed land classifications and differing management regimes on public forest lands in the West create a viable opportunity for the practice of "light hand on the land" management in National Parks and Wilderness Areas. For example, timber harvests on adjacent National Forests can provide firebreaks, and reduce the potential for fires to escape these wildlands. However, officials have to maintain ready awareness of resource characteristics on bordering lands, and the risks posed by various climatic conditions. Forest Service officials exercised sound judgement this year in deciding to immediately attack all wildfires in Wilderness Areas, due to extreme conditions brought on by the drought.

The American Forestry Association believes that a "light hand on the land" is the right policy for the management of our National Parks and Wilderness Areas. The natural character of these lands is the distinctive value for which they are treasured. However, we do not believe in a policy that completely depends on nature to manage these resources for us. Perhaps a purely natural management regime would have been right when Yellowstone was established in 1872, but it is certainly not right today. Increasing numbers of people are living on the fringe of these wildland areas, and communities and regional economies are highly dependent on the natural resources therein. The policy must protect these human values and interests, while providing for management sensitive to the integrity of the natural ecosystem.

Therefore, the let-burn policy, as it is being applied in our parks and wilderness areas today, needs to be amended. Forest and park managers must play a more direct role in creating vigorous and healthy forest ecosystems which present less threat of catastrophic wildfires. The policy should allow, and encourage, the use of prescribed burning as a management tool, to carry out fuel reductions and promote the development of a forest mosaic. Of course, people will have to be educated that fire is an important, and safe, management tool.

We also believe that improved guidelines are needed to determine the appropriate response to natural wildfires occurring in particular forest types, under various climatic conditions. Existing guidelines gave little direction to park officials for the unusual conditions in Yellowstone this year, thus confusion reigned. We recommend that the firefighting community, comprised of the Park Service, Forest Service, and other federal, state and local agencies, establish a working group to prepare new guidelines which recognize the increasing threat to human values and danger of extreme weather conditions. The Yellowstone experience should provide valuable information to help develop these guidelines.

Finally, we believe the policy of allowing natural fires to burn is still appropriate in some areas under normal weather conditions. But, a threshold risk index should be agreed upon, beyond which all natural fires will be attacked immediately. Such an index should be a part of the guidelines mentioned above. We encourage a cautious threshold that acknowledges the possibility of increasingly warm and dry conditions as our climate changes.

MONTANA WILDERNESS ASSOCIATION

Subcommittee on Public Lands, National Parks, and Forests
Senator Dale Bumpers, Chairman
Re: Hearing on Fire Management Policies-September 29,1988

Dear Senator Bumpers,

October 10, 1988

MWA is on record in support of a fire policy of allowing fire to resume its natural role in wilderness areas. We support carefully prepared fire management plans which conform to the intent of the 1964 Wilderness Act of allowing natural processes to operate as freely as possible within wilderness.

While we maintain our support for this fire management policy, given the results of the 1988 fire season, it is clear that some kind of review will occur.

We support holding future hearings to examine implementation of this policy, but only after agency review and initial scientific data for the 1988 fires are available. We feel this review could be undertaken in the 101st Congress.

Please enter these comments into the hearing record.

Sincerely,
Lou Bruno
Lou Bruno,
President, Montana Wilderness Association

cc:Senator John Melcher
Senator Max Baucus
Representative Pat Williams
Representative Ron Marlenee

P.O. Box 635 • Helena, Montana 59624 • (406) 443-7350

TEXAS A&M UNIVERSITY
Department of Recreation and Parks
College Station, Texas 77843-2261 • (409) 845-7324

Office of the
Department Head

September 27, 1988

Senator J. Bennett Johnston
136 Hart Office Building
Washington, DC 20510

Dear Senator Johnston:

I would like to have the opportunity to discuss the tragic wildfires in Yellowstone National Park with you personally. I am especially interested in discussing the major changes in fire policy that are needed to prevent such disasters from occuring in other national park and wilderness areas. In the meantime, I would like to share with you some of my observations about the "let burn policy" and provide the outline of what I believe is a sound approach to fire and vegetation management in park and wilderness areas.

I am qualified to address this issue because I am considered to be one of the foremost authorities in the United States on restoration ecology and fire policy in park and wilderness areas. Currently I am Head of the Department of Recreation and Parks at Texas A&M University, the leading academic program in the field. I studied forest ecology at the University of California-Berkeley, and I have conducted research on fire management and restoration ecology in the national parks for nearly 20 years. Over those two decades I have published numerous scientific papers and delivered many talks at scientific meetings that have been critical of Park Service vegetation management practices.

In fact, I was critical of the Park Service prescribed burning program when it started. I was a ranger-naturalist at Kings Canyon National Park when the program began. At that time, I wrote a white paper that pointed out the flaws in the program and the entire ranger-naturalist staff agreed with the conclusions and signed the paper. This was the first documented internal Park Service critique of the prescribed burning program. The points that we made then are still true today, only now the problem has grown worse and it has taken on a more ominous dimension with the disastrous Yellowstone fires.

I also understand the practical side of park and wilderness management through my experience as a legislative consultant on park policy, which included drafting legislation that has become state law in California. I also managed the state park system of California, which is the largest state park system in the United States, for four years in my capacity as a park commissioner.

My observations and recommendations are as follows:

1. ***The conflagrations in Yellowstone National Park and surrounding wilderness areas were caused by the Park Service's and the Forest Service's "let nature take its course" approach to park and wilderness management.*** The changes that took place in the vegetation and fuel loadings over many years of fire suppression were preventable and reversible. Fires cannot burn without fuel regardless of weather conditions, and the unprecedented expanse of fuels caused the unprecedented size of the wildfires. Shifting the responsibility for the Yellowstone disaster to nature is not an acceptable or defensible excuse. The Park Service and the Forest Service were aware of the risks of a "let burn" policy in untreated forests, especially during a drought, and they are solely responsible for their decisions and the consequences.

2. ***Yellowstone is just the first park to go up in flames, there are many other national park and wilderness areas in a similar unnatural condition that will burn eventually if immediate action is not taken to reduce the hazards.*** The Park Service and the Forest Service must make major changes in fire and vegetation management policy that go beyond making minor improvements in burn prescriptions. There are no safe "let burn" fires or "unscheduled prescribed fires" in large expanses of forest, such as the lodgepole pine forests of Yellowstone National Park. The only relatively safe method of managing such forests is mechanical treatment or "scheduled prescribed fires." Even scheduled prescribed fires may require prior treatment by mechanical methods to reduce artificially high levels of pole-sized trees, undergrowth and dead fuels. One safety condition is absolutely essential whenever fire is used as a tool to manage vegetation: the area to be burned must first be surrounded by fuel breaks or other barriers to the movement of fire.

3. ***What the Park Service and the Forest Service do about the management of fire, insects, diseases, and wildlife profoundly affects the economic welfare and safety of adjacent landowners.*** These agencies can no longer justify asking people on the boundary of park and wilderness areas to be good neighbors and live with the consequences of agency policies, the agencies are obligated to become good neighbors themselves. Therefore, future management practices within park and wilderness areas must be formulated in cooperation with adjacent communities and landowners.

4. ***Continuation of the current policy of "letting nature take its course" will:***

   a. result in a pattern of repeated large-scale wildfires that destroy park and wilderness resources;

   b. waste many hundreds of millions of dollars that could have been used to manage vegetation to enhance resource values and prevent catastrophic wildfires;

c. create artificial vegetation that is inconsistent with the purposes of park and wilderness areas;

d. damage private property;

e. threaten the economic welfare of surrounding communities and landowners; and

f. eventually result in a disastrous loss of human life.

5. ***The "let nature take its course" policy of relying primarily on lightning fires to manage vegetation, which led to the Yellowstone disaster, is based on a false premise -- that national park and wilderness areas were pristine or untouched by humans when they were set aside. They were NOT pristine.*** Much of the vegetation in park and wilderness areas had been profoundly altered by thousands of years of management and use by aboriginal people. Aboriginal fires interacted with lightning fires to create and maintain vegetation in a mosaic pattern that supported a diverse and abundant variety of wildlife and contained wildfires within limited areas. Lightning fires alone cannot restore this vegetation mosaic to its natural scale and diversity. These lightning fires will simply create artificial vegetation that violates the purposes for which park and wilderness areas were set aside. Aboriginal people were a part of nature and their use of fire changed vegetation which, in turn, influenced the effects of lightning fires. Thus, today many lightning fires do not burn in a natural manner because they no longer interact with the effects of aboriginal fires. Since aboriginal people have been eliminated from national park and wilderness areas, these areas must be deliberately managed now and forever to ensure the existence of natural vegetation mosaics.

6. ***The areas burned within Yellowstone National Park will become more dangerous fire hazards in the future than they were before the summer of 1988.*** The burned over area will grow back to become a forest of trees of the same age. This means that over hundreds of thousands of acres much of the forest will grow older and thicker as a unit, becoming a vast unbroken mass of highly flammable fuel. Then the whole forest will burn again. That is artificial because it was caused by modern management, it is also destructive and dangerous and it should not be permitted to happen. We know how to prevent it and we should begin planning now.

7. ***The same vegetation management strategies that would prevent a second disaster in Yellowstone National Park will also work to prevent similar disasters from occurring in other park and wilderness areas, while simultaneously restoring the natural character of the vegetation.*** The answer is to go back to the basics and approximate what happened before we arrived on the scene and began changing vegetation to suit our European prejudices. We must restore vegetation mosaics that are similar in scale and variety to the ones that existed in each park and wilderness area prior to our intervention. These mosaic patterns can then be easily maintained as an ever changing kaleidoscope of vegetation types at

relatively low cost. Before we arrived on the scene, the natural dynamic vegetation mosaic that resulted from the interaction of aboriginal and lightning fires worked for thousands of years to produce safe and attractive forests with a wide variety of wildlife, and it could work for thousands of years into the future to produce the same benefits for us and our children.

8. ***In order to implement the ecologically sound approach to vegetation management in national park and wilderness areas outlined above, the Park Service and the Forest Service should establish multidisciplinary teams of scientists and managers for particular geographic regions.*** These teams should be composed of restoration ecologists, fire managers, anthropologists, fire history specialists, economists, foresters and other relevant professionals. Their task must be to establish clear measurable objectives or "standards of naturalness" for restoring and maintaining vegetation mosaics in national park and wilderness areas that are based on historic conditions. They must also devise safe and cost-effective management strategies to achieve those vegetation objectives. Finally, these teams must work in cooperation with the neighbors and visitors of park and wilderness areas.

9. ***The approach to vegetation management outlined above is based on the premise that the goal is not to manage fire, but the effects of fire.*** National park and wilderness areas were not set aside to preserve processes such as fire, they were set aside for a host of values that fire may or may not have had a role in creating. In other words, the Park Service and the Forest Service must ultimately be held accountable for what fire leaves behind, not the presence or absence of fire.

I hope that you find these observations and recommendations helpful in your deliberations on the national park and wilderness fire policy problem. I will continue to assist you in any way that you feel is appropriate, including formal testimony at Congressional hearings. I have also enclosed publications that you may find helpful as background material on the issue. Please do not hesitate to call my office at (409) 845-7324 or my home at (409) 764-8295 if you think that I can be of further service.

Sincerely,

Thomas M. Bonnicksen

Thomas M. Bonnicksen, Ph.D.
Department Head

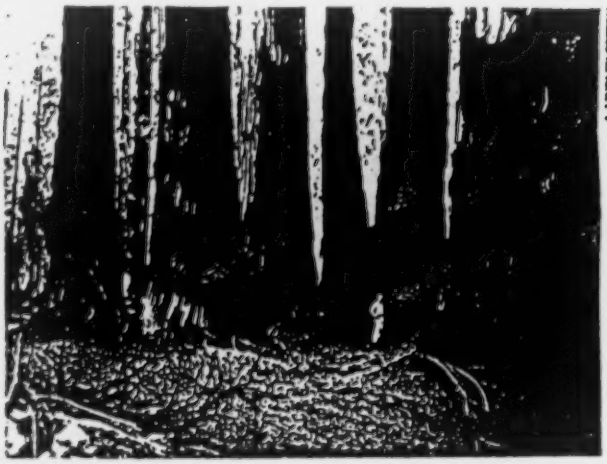
TMB:ddp/Firelet3.doc

Standards of Naturalness: The National Parks Management Challenge

by Thomas M. Bonnicksen

The ecological record of national parks and reserves throughout the world is rapidly disappearing. The loss of this information is occurring because of management decisions that lack clear objectives and fail to consider fundamental ecological principles. The problem is especially serious in the United States, because the trend toward process management is producing changes that could lead to the extinction or dramatic transformation of entire natural ecosystems.

When the physical evidence of the past disappears, with it goes the opportunity to document the natural structure and function of park ecosystems. Such knowledge is essential for developing the "standards of naturalness" so urgently needed as objectives for managing national parks. The loss of this knowledge is tragic, because standards of naturalness have not been developed for any national park anywhere in the world.



A. LINDLEY COTTON

Giant sequoias at Broken Arrow Grove in Sequoia National Park, California, after fire management practices were instituted by the National Park Service.

What is "Natural"?

Most of the legislation creating national parks and reserves—and administrative regulations that interpret that legislation—refers to the goal of maintaining natural conditions; numerous papers and reports have also been published reinforcing or advocating naturalness as a goal for national parks. Yet the definition of "natural" differs each time. Some advocate letting nature take its course, and others advocate restoring a historic scene—while still others advocate controlling evolutionary change within acceptable limits. In each case the definition of naturalness is superficially clear and ultimately ambiguous. Such definitions provide park managers with goals, but because of their ambiguity they also create false and therefore highly destructive misunderstandings.

Although these kinds of goals are essential to large-scale ecosystem management, they cannot provide management targets because they are idealistic and qualitative. They are not expected to be attained, but merely to provide a sense of direction. Objectives, on the other hand, are quantitative targets achievable during a specific period. They lead toward goals, but they are not the equivalent of goals. Instead, objectives are those standards that serve as a measure of success or failure in achieving a goal. Standards of naturalness perform this function.

During the past century little scientific attention has been focused on developing reliable standards of naturalness. During this long period, however, techniques for manipulating ecosystems have progressed from strict protection to the use of chemicals, mechanical treatments and prescribed fire. Thus, current management techniques employ the sophistication of late-20th-century technology while their purposes are no more clearly understood than if we were still in the 19th century; the techniques have outdistanced the goals. Perhaps we ought to pause and reflect on the wisdom of Confucius, who said 500 years before Christ that "for one who has no objective, nothing is relevant."

The "Great Experiment"

Symptomatic of the paucity of creative and carefully considered work on ecosystem management is the recent emphasis on process as a standard of naturalness for parks. This is potentially the most destructive definition of naturalness to have emerged in modern times. Fires, floods, landslides, succession and bio-geochemical cycles are all examples of ecological processes. Advocates of process-oriented goals believe that such processes are natural. Therefore, preserving processes becomes the goal, and no effort is made to ascertain or mitigate the potentially deleterious and long-term effects of these processes on park ecosystems.

Both widespread charring of giant sequoia bark by fire and the loss of aspen forests to overbrowsing by unregulated elk populations are acceptable costs to those insistent on preserving abstractions like "processes," practices involving fire and the "natural regulation" of animals. In

(Continued on page 120)

Thomas M. Bonnicksen is professor and head of the Department of Recreation and Parks at Texas A & M University in College Station.

BIOGRAPHICAL SUMMARY

Dr. Thomas M. Bonnicksen
Department Head and Professor
Department of Recreation and Parks
Texas A&M University
College Station, Texas 77840-2261
Phone (409) 845-7324

Dr. Bonnicksen earned his B.S. (forestry, wildlife and range management, 1970), his M.S. (forest ecology, 1976) and his Ph.D. (resource policy and public administration, 1978) from the University of California-Berkeley. His research in restoration ecology and resource policy analysis, especially the use of systems approaches to problem-solving, is recognized internationally. Dr. Bonnicksen is currently Head of the Department of Recreation and Parks at Texas A&M University. He has administrative responsibility for departmental academic programs, research and extension. The department includes 31 faculty and staff members, 200 undergraduate students and 70 graduate students, nearly half of which are Ph.D.s. Dr. Bonnicksen joined Texas A&M on December 1, 1985, after serving as an assistant and associate professor of forest policy at the University of Wisconsin-Madison. Prior to moving to the University of Wisconsin, he was appointed by Governor Reagan to serve four years as a member of the California State Park and Recreation Commission, and he chaired two of the commission's subcommittees. He also served as a ranger-naturalist with the U.S. National Park Service, and as a member of the Pacific Crest National Scenic Trail Advisory Council, and the U.S. Forest Service Region 5 Wilderness Permit Advisory Committee. Dr. Bonnicksen worked as a consultant to the California Legislature where he wrote the legislation that currently guides the classification and management of California's state park system. He also served as a consultant to the U.S. Forest Service, the U.S. National Park Service, the International Council for Research in Agroforestry, the Upper Great Lakes Regional Commission, the Wisconsin Department of Natural Resources, the Upper Mississippi River Basin Commission, Parks Canada, and other organizations. Dr. Bonnicksen also held posts as president, chairman and vice-chairman of several organizations, including the Southwest Wisconsin Chapter of the Society of American Foresters. Dr. Bonnicksen has received IBM's Project Trochos Award, the U.S. National Park Service's Southeast Regional Award and the Western Region's Special Achievement Award, the California Golden Bear Award, the S.B. Show & E.I. Kotok Award in Conservation, and he is a member of Xi Sigma Pi and Alpha Gamma Sigma. Dr. Bonnicksen has published over 50 scientific papers, including articles in such journals as *Ecology*, *Environmental Management*, *Journal of Applied Photographic Engineering*, *Leisure Sciences*, *Public Administration Review*, *Forest Ecology and Management*, *the Journal of Environmental Management*, and others. Dr. Bonnicksen also wrote an expert system software package called EZ-IMPACT ™ for MS-DOS microcomputers that is currently being used by many universities, government agencies and firms in the U.S. and several foreign countries.

Selected References:

1. Bonnicksen, T.M. 1988. Restoration ecology: philosophy, goals and ethics. The Environmental Professional. 10(1): 25-35.

2. Bonnicksen, T.M. 1988. Standards of naturalness: the national parks management challenge. Landscape Architecture 78(22): 120, 134.

3. Bonnicksen, T. M. and E. C. Stone. 1985. Restoring naturalness to National Parks. Environmental Management 9(6): 479-486.

4. Bonnicksen, T.M. 1984. A call for accountability. Restoration and Management Notes II(1): 12-13.

5. Bonnicksen, T. M. 1983. U.S. National Park Service relationships with local communities: a problem analysis. Western Wildlands 9(2): 11-13.

6. Bonnicksen, T. M. and E. C. Stone. 1982. Reconstruction of a presettlement giant sequoia-mixed conifer forest community using the aggregation approach. Ecology 63(4): 1134-1148.

7. Bonnicksen, T. M. and E. C. Stone. 1982. Managing vegetation within U. S. National Parks: a policy analysis. Environmental Management 6(2): 101-102, 109-122.

8. Bonnicksen, T.M. and E. C. Stone. 1981. The giant sequoia-mixed conifer forest community characterized through pattern analysis as a mosaic of aggregations. Forest Ecology and Management 3(4): 307-328.

9. Bonnicksen, T. M. 1980. Computer simulation of the cumulative effects of brushland fire-management policies. Environmental Management 4(1): 35-47.

10. Bonnicksen, T. M. and E. C. Stone. 1978. An analysis of vegetation management to restore the structure and function of presettlement giant sequoia-mixed conifer forest mosaics. Report to the U. S. National Park Service Western Regional office. 159 pp.

11. Stone, E.C. 1965. Preserving vegetation in parks and wilderness. Science 150(3701): 1261-1267.

12. Leopold, A.S., S.A. Cain, C.M. Cottam, I.N. Gabrielson, and T.L. Kimball. 1963. Wildlife management in the national parks. American Forests 69:32-35 and 61-63.

THE WILDERNESS SOCIETY

September 30, 1988

The Honorable Dale Bumpers, Chairman
Subcommittee on Public Lands, National Parks and Forests
308 Dirksen Senate Office Building
Washington, D.C. 20510

Dear Mr. Chairman:

History was made at Yellowstone this summer. Unfortunately, it was made at the expense of nearby residents and merchants, and of Americans who travelled thousands of miles to see our first national park. For firefighters, being part of history proved both hazardous and exhausting.

Some critics say that the fires should have been stopped. They blame the policies of the U.S. Forest Service and National Park Service. But the facts show that this blame is misplaced.

The agencies' fire management policy for national parks and wilderness areas is as flexible as a policy can be. While natural fires are to be left alone when possible, the policy calls for suppressing a fire if conditions warrant or if life or property is threatened. Because those exceptions are so broad, the Park Service could have fought every single Yellowstone fire from day one and still have been following what has been called a "natural burn" policy.

Did the Park Service and Forest Service make unwise judgments in applying this policy? Should certain fires have been fought earlier, or differently? Perhaps. We do not have nearly enough facts at this point to assess the agencies' judgment. These matters will be scrutinized over the months to come, and hard questions will be asked. The first report is due in December, and others are likely to follow.

The Wilderness Society believes that the National Park Service's current policies are based upon sound science. Indeed, many believe that the all-out fire suppression policy that was followed in Yellowstone for a hundred years contributed to the severity of this year's fires by allowing a dangerous build-up of fuel. Throwing out current policy may be the worst thing we can do.

We support the course currently being followed by the Park Service and Forest Service: allowing scientists and other experts to examine and report on what happened. By early Spring there should have been

1400 EYE STREET, N.W., WASHINGTON, D.C. 20005
(202) 842-3400

ample time for this process to be completed. Then we can review how the policy was implemented, and whether any alterations are necessary.

We humans have come to have a very high opinion of our capabilities. We believe that we can put out any fire if we try. But a western wildfire under conditions that may occur only once every two or three centuries is a different creature from a house fire. It should be compared to an earthquake, flood, or other natural phenomenon. No matter how many helicopters, bulldozers, chemicals, and firefighters we throw up against a raging wildfire, we may prove no match for nature. Blaming agency policy or the man who happens to be head of the Park Service for the result makes no more sense than blaming Willard Scott for the drought.

Misconceptions about the fire management policy are matched by misconceptions about the fires' impact on Yellowstone. News reports of the park's death are, as Mark Twain would say, greatly exaggerated. The geyser system, for example, was not affected at all. For the forest and the wildlife, the fire will be a net plus. There will be charred stands of timber, but they will not predominate. Meadows rich in wildflowers will spring up. Underrepresented aspen will take root. Birds that need dead-tree cavities for nests will colonize burned areas. Anyone doubting nature's restorative powers should visit Mt. St. Helens and view the post-eruption landscape.

Secretary of Interior Donald Hodel is talking about a major tree planting program. He seems to believe that the government can do a better job than nature. If the Secretary is worried that tourists will shun Yellowstone in the next few years, he shouldn't be. Yellowstone has a mystique that this year's fires have only enhanced. Reporters and TV crews will flock to the park next spring, and in their wake will come Americans, and many foreigners, eager to see first-hand what nature has wrought. As a woman from Missouri put it, while talking to a reporter: "It's something I wouldn't want to miss out on."

Fire terrifies us, but this year it has also taught us. We learned the staggering power of nature. We learned, too, that nature works in ways that may seem strange to us. We learned that, "Bambi" notwithstanding, fire is healthy for forests and wildlife. During a year in which our oceans have taught us the peril of too much dumping, and the atmosphere sent signals that our energy policies are a prescription for disaster, the Yellowstone fires were an important part of the chorus. We can push nature, they said. But only so far.

Sincerely,

George T. Frampton, Jr.

George T. Frampton, Jr.
President

STATEMENT BY

TERRY POVAH, PRESIDENT

HAMILTON STORES, INC.
SMITH & CHANDLER, INC.
STAGECOACH INN

BEFORE JOINT HEARING OF

SENATE ENERGY & NATURAL RESOURCES COMMITTEE

AND

SENATE AGRICULTURE, NUTRITION & FORESTRY COMMITTEE

SEPTEMBER 29, 1988

WASHINGTON, D. C.

MR. CHAIRMAN AND MEMBERS OF THE JOINT COMMITTEES:

Thank you for this opportunity to submit this statement for the consideration of the joint committees on the Yellowstone fires and the economic impact they have cast during the 1988 season.

My name is Terry Povah, representing Hamilton Stores, Inc. in Yellowstone National Park; Smith & Chandler, a retail store in West Yellowstone; and the Stage Coach Inn, also in West Yellowstone.

Hamilton Stores, Inc. is the oldest concessioner under the jurisdiction of the National Park Service, being a family owned third generation business. We are privileged to have had the opportunity of serving the visitors to Yellowstone since 1915. During that time Hamilton Stores has experience a variety of traumatic events. Most recently those have been, but not limited to, the earthquake in August, 1959, the Teton Flood disaster during the summer of 1976, the oil embargoes during the winter of 1978 and summer of 1979 and this year, probably the most devastating of all, certainly financially, have been the FIRES OF YELLOWSTONE.

As one of the primary concessioners in Yellowstone, Hamilton Stores operates 15 stores in the Park, has its main office and distribution center just inside the boundary at West Yellowstone and during the summer employs approximately 850 including about 100 in or near West Yellowstone and during the summer employs approximately 850 including about 100 in or near West Yellowstone. Hamilton Stores also owns one-half of Yellowstone Park Service Stations (100 employees) and operates it jointly with TW Recreational Services, the other primary concessioner in Yellowstone National Park.

Of our 15 store locations within the Park, 7 were forced to close early this year as a result of the fires. We experienced 20 complete evacuations with some stores being evacuated as many as 7 times.

These evacuations involved 560 of our employees, most of whom were dislocated under the most trying circumstances. The balance of the employees, 170, are either still working at the few remaining stores we have open or were released early when their stores closed for the summer. Of the 2,000 TW Recreational Services employees over 1000 had to be released early.

Our first evacuation took place on July 23. Not only did we have all the foregoing problems to deal with but we also had 25 road closures and those road closures were between the different developed areas on the Grand Look road as well as several of the entrances to the Park, mostly the South entrance.

On September 8, the Park was completely closed with the exception of West Yellowstone to Madison Junction (14 miles), Mammoth to Gardiner (6 miles) and on September 10, even these few remaining roads were closed for 2 days.

LOSS OF REVENUE:

As a direct result of the Yellowstone fires and ensuing media coverage Hamilton Stores Inc. has experienced 3.5 million dollars in lost sales. As a result of the early closures and evacuations, our company lost a total of 178 days of business, 96 days from early closures and 82 days from evacuation. Added to this is the cost of evacuating 560 employees with an associated salary cost of nearly $60,000, plus over $7,000 to relocate some of our trailer people in temporary trailer hookups. We can put no dollar amount to other costs such as the problem of losing almost 50% of our employees who just packed up and went home because of fear of fire, smoke, stress, health problems and other inconveniences. I might point out that these statistics are staggering when one considers that Yellowstone conducts 90% of its business in 80 days. Also, until mid-July Hamilton Stores Inc. along with other concessioners and seasonal business' surrounding Yellowstone merely pay start-up expenses and it is the period from mid-July to the end of August that enables any of us to make any profit during the year. Later we count on the fall for a little "padding" to our profits, but even that has been denied us this year as the fires continue to burn and park visitor services, for all practical purposes, shut down for the season.

Another major concern is that during these fires several miles of power lines were destroyed, and consequently, to maintain power throughout Yellowstone portable generators had to be put into use. The expense incurred by Montana Power Co. for replacing transmission lines, employee overtime hours, generator rental, etc. should not be passed

through to the concessioner. It is our understanding that these costs will be between a million and a million two hundred thousand dollars. Montana Power Co. should not have to absorb this loss and it would not be fair to expect the concessioner to absorb this cost or to pass it on to the visitor.

Without getting into the policy or politics of the National Park Service or National Forest Service with regard to fire fighting tactics and suppression I would like to make a few comments about our experiences with the NPS and NFS.

When the fires first started, we concessioners were notified that there were in fact fires in Yellowstone that had the potential to consume a lot of acreage. The ones of immediate concern were the Red and Shoshone fires as they had potential of reaching the Grant Village area. In a coordinated effort by the local National Park Service staff we were kept well informed however, as the fires progressed the problem went from just acreage concerns to the possibility of the entire Grant Village area being evacuated due to the tremendous fire growth rate. As the fires increased the communications deteriorated. By this time the Clover-Mist fire was huge, the Fan was growing and the North Fork fire was not only a concern in the Old Faithful area but Madison Junction as well. During this time the Park Service was very cooperative in providing support to our employees with orientation, special meetings, briefings, etc. and we supported most of their activities at that stage of the fire. It was not until the threat of the North Fork fire reaching the Fishing Bridge area that we really questioned how concerned the Park Service was for some of the structures in Yellowstone. We heard that the only priority

in that area was the Fishing Bridge store and the Museum, that no other buildings were a priority. This concerned us greatly as we have joint interest in a service station and a service station dormitory in this area as well as our own dormitory. TWRS has a RV trailer park, as well as there being a repair service garage and other support buildings in the area. The term SELECTIVE BURN could be used in this incident and we don't know where the directive came from for the Area Commander, but we totally disagree with that policy, if true.

We experienced similar attitudes during the fire storm that swept through Old Faithful and Mammoth, destroying 12 TWRS rental cabins (24 units) at Old Faithful and 6 employee cabins, and the Yellowstone Park Service Station repair service building and vehicles. The economic impact to Yellowstone has been devastating to all concerned. The economic impact concerns by the NPS have been, from the Washington level down, evidently of no concern as it was mentioned by a regional employee of the National Park Service that "that's part of the risk of doing business in a National Park".

We feel that the NPS has a financial obligation to provide some positive media promotions to let the WORLD know that Yellowstone, as our first national park, and certainly one of our most popular parks, as well as an international tourism destination, is alive and well. That we still have a host of animals, thousands of thermal features, waterfalls, lakes and rivers and all the support services to take care of the traveling visitor.

This promotion needs to be addressed <u>immediately</u> and then continued for at least the

next two years and should not be limited to just next spring or summer. We do not feel it would be unreasonable for the Department of the Interior, the National Park Service, National Forest Service , Department of Agriculture and other agencies to work in harmony with such organizations as Travel Industry Association of America, Old West Trail Foundation, Yellowstone-Teton Travel Association , State travel commissions from Montana, Wyoming, Idaho, the Dakotas, Utah and Colorado as well as the Chambers of Commerce in a 300 mile radius of Yellowstone Park. Also, on an international basis through the United States Tour and Travel Association. This media coverage should be promoted through specials on TV, continually running videos in key markets promoting the tourism aspect, newspaper and magazine articles, videos and any other educational format, such as mailings, brochures, etc., that can be made available to these organizations as well as the national media.

This is a fine opportunity for the NPS to sell their terminology of a " new beginning for Yellowstone" and to explain how the fires got out of control, the different types of fuel build-up that is in the forest, the effects of the pine beetle, mild winters, light summer rains and more specifically the drought and high winds of 1988.

Whether the Park Service is at fault or the Forest Service or the policy needs to be reviewed are all issues that can be decided for years to come. Now is the time we need to promote Yellowstone. This is the time tourism industry people are selling tours for next year and booking reservations. People will soon be planning vacations and they will not forget what has happened in Yellowstone. <u>We need action now.</u>

There have been comments that next year business might be normal because of curiosity seekers. We cannot gamble with this thinking. It is my concern that the following years will be more of a financial risk than the summer of 1989. We all need to work together and leave egos on the side lines and create a team effort for the region, both now and in the future.

1988 YELLOWSTONE FIRE OUTLINE SUMMARY

I. Lost Business Days
   A. Store shutdown due to employee evacuation
   B. Early closure due to lack of business
   C. Understaffing due to early employee departures causing store closure

II. Lost Revenue
   A. Frequent and intermittent road closures
      1. Park visitors - Commercial and private buses
   B. Decrease in tourism - 30%
      1. Smoke
      2. Media coverage
      3. Perceived danger
   C. Perishable merchandise lost
   D. Smoke damage
   E. Power Outages

III. Employee Expense
   A. Standby salary $58,828.00
   B. Trailer subsidy during evacuation $7,149.10
      Cost of moving employees to temporary locations, hotels/motels or dorms. The cost is not available at this time.
   C. Recruiting cost for employee replacements
   D. Anticipated loss of alumni for 1989 - 1988 brought an alumni return rate of 60%. Anticipated alumni return rate for 1989 is 35%.

1988 YELLOWSTONE FIRE

DATE	INCIDENT	EVACUATED
JULY 22-	South Entrance closed p.m.	
JULY 23-	***Grant Village General*** and ***Grant Mini evacuated*** (a.m.)	107
JULY 24-	***West Thumb evacuated***. Craig Pass closed.	013
JULY 25-	***West Thumb reopened.***	
JULY 26-	***West Thumb evacuated.***	009
JULY 27-	Craig Pass reopened. ***West Thumb reopened.***	
JULY 30-	***West Thumb evacuated.***	008
JULY 31-	***West Thumb reopened*** in p.m. Hours 9 a.m. - 6 p.m.	
AUGUST 1-	***West Thumb evacuated.***	008
AUGUST 2-	***West Thumb reopened.***	
AUGUST 3 -	***Grant Mini reopened*** in p.m.	
AUGUST 6 -	***Grant Village General reopened***	
AUGUST 11-	Madison to Old Faithful closed in p.m. Craig Pass open all night	
AUGUST 12-	Madison to Old Faithful opened 6 a.m. Grant campground recpened 4 loops.	
AUGUST 15-	Madison to Old Faithful closed at noon. Madison campground evacuated. West Yellowstone to Norris closed 3 p.m.	

AUGUST 16- West Yellowstone to Old Faithful closed a.m. to noon. Norris to Madison closed all day.

AUGUST 17- Madison to Norris open a.m.; closed 1:00 p.m. for balance of day. Madison to Old Faithful closed 2 p.m. to 7:30 p.m.

AUGUST 18- Madison to Norris closed. West Gate closed 1 p.m. - 4 p.m. South Gate closed 7:00 p.m.

AUGUST 20- Madison to Norris closed 12:15 p.m.

AUGUST 21- ***Grant Village General***, ***Grant Mini*** and ***West Thumb evacuated*** second time. 070
Grant General closed for season.

AUGUST 22- ***Grant Mini reopened*** in a.m.

AUGUST 24- ***Canyon Village evacuated*** 10:00 a.m. 111
West Thumb reopened in a.m.

AUGUST 25- ***Canyon General store closed.***

AUGUST 26- Most roads closed. West Yellowstone to Old Faithful reopened 10:00 a.m.
West Thumb evacuated third time 010

AUGUST 27- West Gate open to Old Faithful. East Gate open to Lake.

AUGUST 28- ***Canyon Photo reopened.***

AUGUST 29- ***Roosevelt*** and ***Lake closed for season*** . Dunraven, West Yellowstone to Old Faithful and West Yellowstone to Mammoth open.
West Thumb reopened in a.m.

AUGUST 30- Craig Pass open. Norris to Canyon and South Entrance closed. Dunraven closed late p.m. and West Gate closed 1:00 p.m.

AUGUST 31- ***Mammoth Xmas Shop closed*** for season as scheduled.

SEPT 1 - ***Bridge Bay closed for season*** at 6:00 p.m.
All roads open at 9:00 a.m. West Gate closed p.m.
West Yellowstone Dormitory evacuated p.m. 007

SEPT 2 - All roads open a.m.

SEPT 4- ***West Yellowstone dorm reopened.***

SEPT 5 - North Entrance closed.

SEPT 6 - Canyon to Tower closed. Cooke City/Silvergate evacuated.

SEPT 7 - ***Old Faithful Basin, B.A.C., and Photo Shop evacuated a.m.*** 109
Old Faithful B.A.C. closed for season.
Tower Fall evacuated p.m. 021
Tower Fall closed for season
Canyon Photo evacuated a.m. 012

SEPT 8 - ***Old Faithful Photo reopened.***
West Yellowstone to Madison and North Entrance to Gardiner open. Balance of Park closed.

SEPT 9 - ***Fishing Bridge trailer park evacuated.*** 030
Canyon Photo reopened.

SEPT 10- ***Mammoth evacuated.*** Park closed. 018
Fishing Bridge Dormitory evacuated. 021
West Thumb evacuated 006

SEPT 11- ***Old Faithful Basin reopened***
Fishing Bridge closed for season

SEPT 12- ***West Thumb reopened. Mammoth reopened.***
Park open except Tower to Canyon and Mammoth to Tower. Craig Pass closed for season.

TOTAL EMPLOYEES EVACUATED 560

BUSINESS DAYS LOST DUE TO EARLY CLOSURE

Store	Date Closed	Scheduled Closing Date	Business Days Lost
Grant General	8/21/88	9/19/88	29
Canyon General	8/25/88	9/5/88	12
Lake General	8/29/88	9/18/88	20
Roosevelt Photo	8/29/88	9/6/88	08
Mammoth Xmas	8/31/88	8/31/88	0
Bridge Bay	9/1/88	9/17/88	16
Tower General	9/7/88	9/13/88	06
Old Faithful B.A.C.	9/8/88	9/15/88	08
Fishing Bridge General	9/11/88	9/8/88	(03)
Grant Mini	9/27/88	9/27/88	0
Canyon Photo	10/11/88	10/11/88	0
Old Faithful Basin	10/12/88	10/12/88	0
West Thumb Photo	10/16/88	10/16/88	0
Old Faithful Photo	10/17/88	10/17/88	0
Mammoth General	open all year	open all year	0
Smith & Chandler	open all year	open all year	0
			96

1988 YELLOWSTONE FIRES

EMPLOYEE STANDBY EXPENSE

Store	Dates (No. of Days)		Employee Evaucation Days	Standby Salary
Grant General	7/23 - 8/5	(14)		
	8/21 - 8/25	(05)	1216	$33,282.00
Grant Mini	7/23 - 8/5	(14)	35	965.00
West Thumb	7/25 - 7/30	(06)		
	8/21 - 8/23	(03)		
	8/26 - 8/28	(03)		
	9/10 - 9/11	(02)	116	3,069.00
Canyon General	8/24 - 8/29	(06)	366	9,659.00
Canyon Photo	8/24 - 8/27	(04)		
	9/7 - 9/8	(02)	57	1,588.00
Old Faithful B.A.C.	9/7 - 9/10	(04)	44	1,124.00
Old Faithful Basin	9/7 - 9/10	(04)	161	4,361.00
Old Faithful Photo	9/7 - 9/8	(02)	11	317.00
Tower	9/7 - 9/9	(03)	61	1,567.00
Mammoth General	9/10 - 9/11	(02)	28	740.00
Fishing Bridge General	9/9 - 9/14	[illegible]	80	2,156.00
		82	2175	$58,828.00

SEP 27 11 4:25

James M. Hagood
Attorney at Law
11772 West Asbury Place
Lakewood,Colorado 80228
Tel. (303) 969-8424

Sept. 21, 1988

Chairman, Subcommittee on Public Lands,
National Parks, and Forests of the
Committee on Energy and Natural Resources
Senator Dale L. Bumpers
308 Dirksen Senate Office Building
Washington, D. C. 20510

Re: Hearings on Mismanagement of Fires in Yellowstone National Park, and Hearings to correct management practices of National Park Service to assure that trust responsibilities are not breached in future.

Dear Senator Bumpers:

I called you office today, and spoke with one of your staff assistants on whether hearings on the above referenced matter will be held in Wyoming.

As I understand matters you have decided not to conduct any hearing until the fires are put out in Yellowstone. Also, I was advised that you have visited the area, and have observed first hand the devastation that resulted from the fires which got out of control.

In mid July I was in Yellowstone, and I personally witnessed the fires, and I encountered the results of the Dept. of Interior's handling of the matter at that time.

On July 28, 1988, I wrote an letter to Mr. Hodel setting forth "statement of facts", and at that time, because of the seriousness of the situation, I urged an congressional oversight hearing at that time.

Please find attached is an copy of my July 28, 1988 letter to Mr. Hodel. Todate, Sept. 21, 1988, I have not received any response to my letter. Recently, I forwarded an letter to Senator Wallop dated Sept. 20, 1988, again noting that I was never provided an response to my letter of July 28, 1988, and in particular to item No. 5 of page 5.(see attached letter dated Sept. 20, 1988 to Senator Wallop, attatached hereto)

While I realize that you, the press and members of your committee are provided an great amount of information from the Dept. of Interior, I would ask that you consider the comments of some of the residents of Wyoming. Their views will be ignored, and not considered, if your committee confines its hearing to only Washington D. C.

To provide you an small sample of the views of the residents of Wyoming, I am attaching hereto some letters to the newspapers in Wyoming. As you can see, the views of the citizens of Wyoming present an much different picture than that which has been presented to your Committee by the Dept. of Interior.

I have included the letters because they represent the views of citizens from Wyoming who live in the area, who have been observing what has happened, and who present an much different picture of the situation than that presented by the Dept. of Interior. When I spoke to your staff assistant, it was unclear whether you were going to hold hearings in Wyoming to allow individuals other that the Dept. of Interior to testify on this matter. When I was speaking to your staff assistant, she indicated that she had to run, she had to speak to someone in Washington D. C., and she told me to call next week.

To the extent that the Committee does not hold hearings in Wyoming, it will be excluding facts which would be pertinent to address the appropriate corrective actions concerning the mismanagement of the Yellowstone fires.

I appreciate that you do not want to hold any hearing until all the fires are out in Wyoming, and Yellowstone, and that it is important that you hear from individuals that are currently fighting those fires, many of whom are from Wyoming. However, when the 1988 Yellowstine fires are put out, and it is time for your Committee to begin its oversight hearings, I would urge that you commence your hearings in Wyoming, and provide the citizens of Wyoming an opportunity to present you their views on the matter.

The let burn decisions were made in Washington D. C. based on the misinformation that allowed fires to rage through forests that had been exposed to drought conditions for months, and through forests whose trees had an very low moisture content.

In total disregard of information and facts warning of the dangers of letting fires burn in forests exposed to drought conditions, the Dept. of Interior ignored residents of Wyoming.

Hopefully, the Committee will allow citizens of Wyoming an opportunity to attend hearings held in Wyoming.

Sincerely,

James M. Hagood

Copy Furnished:

Senator Wallop

Governor of Wyoming
Mr. Michael Sullivan

Yellowstone won't need any policy after natural burn

Editor:

Our wonderful Interior Department has done it again. Yellowstone Park is burning up and Interior Secretary Donald Hodel says how great this is for the park, the people, and the wildlife.

The Interior Department will not admit the mistake they made in letting these fires burn in a year when a record drought is on hand. The National Weather Service even told us that back in April, but no one listened. Now the price is being paid.

The wildlife is running in circles trying to escape the flames; many towns and ranches are seriously threatened and in danger of burning up, and many services inside the park have closed down. The smoke at times is thick enough two hundred miles away to burn your eyes, and tourism has decreased in most areas around the park hurting private interprise. And Hodell says this is good.

The let-burn policy was good about a thousand years ago, but not today. Why not have a let-burn policy only in years of normal moisture content?

In drought years, put the fire out when it is small and not out of control. Don't let Yellowstone burn up in one year; maybe its too late to say that. Maybe we won't even need a burn policy anymore. There won't be any timber left to burn.

In the middle part of July, a National Park ranger handed me a pamphlet near the south entrance, and told me how lucky I was to witness such a natural happening.

I told her I was not lucky, but ashamed to see my tax dollars being abused and Yellowstone Park burning, and I told her this was just the beginning, it will get worse. It did.

I hope that the people of the United States will, in the future, put pressure on the Interior Department to put some common sense in these policies.

BOB HALLAM
Lander

Park Service loses credibility over Yellowstone fire

Editor:

I am absolutely outraged at the Park Service for their miscalculation and/or incompetence on handling the present fires burning in Yellowstone National Park.

I can agree with their original policy, which was belatedly abandoned, that a small fire started by nature should be allowed to burn. But I think this policy should apply only to an old dying or beetle-infested forest and certainly should have never been allowed to burn some 400,000, and growing, acres.

I think that everybody in Wyoming, except the Park Service, knew this was a very dry year and the fires could easily get out of hand, which they have. To most of us the park is a very special place and it is certainly very important to the economy of Fremont County and the rest of Wyoming.

And for the Park Service to say that the fires are beneficial and the area will soon be covered with new growth is nonsense, shows a total lack of good common sense and seems to be just a feeble effort to cover their own mistakes.

A burned forest, and for that matter clear cutting, takes many years to grow back to its original state. I'd guess it will be from 75 to 100 years.

Also I believe the Park Service and the Forest service are beginning to lose most of their credibility.

Each week there is a news release in which the Park Service states how beneficial the fire will be.

First they said it gave them a wonderful opportunity to study the effects of fire on the forest ecology. Well, they have plenty of land to study.

Then they reported how beneficial the fires were for future grizzly bear habitat. But I recall Bridger Teton telling the timber industry that clear cutting was harmful for the bears.

Then the park said how beneficial the fires would be for the elk as it would open more grazing land. Bridger Teton said cutting trees was harmful as it eliminated shelter for the elk.

The park then said the fires would be helpful for the fishing, but Bridger Teton said cutting trees caused erosion and silt to flow into the stream ruining the fishing.

I am somewhat confused by these contradicting statements. I was never for excessive clear cutting of our forest but now I am beginning to wonder what the difference is between a fire and a chain saw. And I am not sure I totally believe either service anymore.

And perhaps the worst part is that I am not sure from talking to a few disgusted firefighters that the park is, even at this stage, real serious in putting out the fires, and only work hard at saving structures. It is easier, of course, to rebuild the cabin that it is to grow a new forest.

If true, I am told that they only construct handmade fire lines rather than use bulldozers which would "ruin" the land. Nor, so I am told, will they build any shape of a road for fire trucks to reach the fire.

Again they would not harm the ecology by bringing fire crews to the fire lines with helicopters but would have them walk and use pack mules. How thoughtful!

In my opinion the fire is a national disaster and every firefighting resource in the United States should be on the fire lines attempting to put the fires out, difficult as it may be.

Since the park, in theory, belongs to all the people of the United States, I would like new management for my share.

GARY SHOEMAKER
Dubois

Preservation idea created tinderbox Yellowstone

Editor:

As I sit here in Rock Springs watching the smoke roll in from Yellowstone Park, I can recall that, as a young U.S. Forest Service Wilderness Ranger, I was told by a wise old forester that because of the U.S. Park Service philosophy of preservation rather than conservation, Yellowstone was like a tinderbox waiting to be lit. He said that when conditions were right that the park would literally burst into flames. That was 23 years ago and he was right.

To understand what is happening in the park, one must understand the difference between preservation and conservation of public lands.

The Park Service manages its properties like a curator manages a museum. It treats the park as if it is an inanimate object to be looked at and admired but not to be touched (in a management sense).

Management by conservation would have addressed the park as a dynamic, living, renewable resource, which, when impacted by millions of humans, must be managed by thoughtful and objective planning, with decisions being based on analysis of known variables rather than by theoretical supposition and, ultimately, panic.

Park Service spokesmen have conned the public into believing that the present conflagration is a natural and highly beneficial cycle of nature which will magically transform the old forest into a new one virtually overnight. Hogwash! The fire which is occurring in the park is destroying valuable wildlife habitat, watershed, and oxygen-generating plant life.

If burning of forests is a proper way of managing them, then carefully planned burning of selected areas during times of low fire danger should have been conducted. Well-supervised timbering in areas of low recreational use should have been considered in the same way that thinning out animal populations is conducted.

Other creative thinking could have been solicited by those geniuses who decided the let the fires burn.

When winter comes and the fires are out, the U.S. Park Service should answer to the American public for their mismanagement of this valuable national treasure. They should be forced by public opinion to examine their management objectives and to account for the foolish decision to let the original fires burn, when good sense would have dictated otherwise.

Hodel's Holocaust was both predictable and preventable. The damage to the forests in aesthetic and economic terms is incalculable.

Perhaps those who administer our public lands will have learned from their tragic mistake. But don't bet on it.

GRANT CHRISTENSEN
Rock Springs

Sunday, September 11, 1988

GUEST COLUMN

Nixing careful harvest of blowdown backfires

By DAVID A. FLITNER

"We, as a nation with a huge government deficit and trade imbalance, should begin to manage risk instead of avoiding it. If we bury our heads in the sand to avoid making resource management decisions on harvesting the blown down timber, we risk serious insect, fire, water quality and erosion problems in the Snake and Yellowstone River drainages."

— David Flitner, Wyoming Farm Bureau Press Release, Sept. 6, 1987

I shouldn't say I told you so, but...

The Mink Creek fire is busy consuming the timber blown down last year in the Teton Wilderness Area. Yellowstone National Park is burning each evening on the NBC Nightly News and now holds the dubious distinction of hosting the longest burning forest fires in U.S. history. The smoke from the fires is reaching as far south as New Mexico. Still environmentalists are busy saying that the fires are "good" for Yellowstone.

I can't, for the life of me, figure out how so many people can rationalize that the catastrophic wildfires, now out of control throughou the state, are the result of proper resource management. Economically they're disastrous. Ecologically, they're generally unnecessary Publicity-wise, they're devastating. Aesthetically, they're repugnant.

Sadly, the charred results of such misguided policies represent a perpetual monument to bureaucratic inflexibility and arrogance. Some of the blazes could have been quelled when they were "yard" sized, bu it was against Forest Service and Park Service policy to interfere witl "natural" fire control. Such lack of action can be aptly characterized a a devastatingly reckless experiment with a sacred trust.

Fire can be a tremendously important tool. It clears old, diseased timber, giving new growth an essential toe-hold in the forest. It provide open clearings for wildlife grazing and clears restrictive brush fron riparian areas.

Just because fire represents part of a natural historical cycle, shoul we allow it to continue to do so? Those who answer yes — the preser vationists seem to think that just about everything should remain "nat ural." Hogwash! Before man refined the ability to manage forest fire he could only sit back and watch the destruction. Today, fires can ofte be controlled, yet environmentalists loudly complain that resourc management is part of the problem, not the solution. (Similarly, befor we invented vaccines to control historically-devastating diseases, natur destroyed humans in much the same manner as it destroyed trees. Surel environmentalists would not stretch their *c'est la vie* attitude towar nature to include man's "unnatural" healing methods. Would they?)

Those who have accepted the responsibility man carries to manage th planet's resources know better.

I am not arguing that merely because we can control something, we necessarily should. In this case, the resources destroyed by fire could have been put to beneficial use. To date, the Mink Creek fire has consumed over 100,000 acres of forest. When it had burned only 24,000 acres, it was estimated that the lost timber represented some $65-75 million of 2x4" studs. I don't believe we can afford a monumental waste of natural resources on such a significant scale, especially in conjunction with the loss of aesthetic values so important to the state, local and even national economies.

Common sense dictates that as tree stands mature and become diseased, they become eligible for harvest for home construction rather than destruction by wildfire. There are any number of harvesting methods that are available today that would not overly impact the local environment and would leave the land with many of the benefits of a "cleansing fire."

Overlooking the commodity loss, we have to ask ourselves if the government's "let it burn" policy is worthwhile. Surely we should aggressively question the wisdom of non-management during the most fire-prone year in half a century, rather than just shrugging it off as "the bureaucracy strikes again."

Should fire be judged to be a proper management tool, as it surely is, why not set aside certain limited areas for controlled burns under scientifically ideal conditions? These burns could be scheduled for a small percentage of Yellowstone Park or any given national forest, park, or wilderness area when chances of wildfire are minimal. The obvious advantage would lie in having the recovery of vast areas of public land occurring on a staggered program over a period of years.

At a recent meeting, the Wyoming Farm Bureau Board of Directors was treated to a nifty little piece of propaganda. The Wyoming Heritage Society has recently sponsored videotaped interviews on KTWO-TV's "Report to Wyoming" with both Yellowstone's Superintendent and its Chief Scientist. Both of these gentlemen treated the Yellowstone fires as benevolent phenomena. They painted a rosy picture of wildlife gently grazing in front of the fires, oblivious to any odd goings-on. They also indicated that the fire was a cyclical phenomenon, coming around every 300-400 years, and that there was little we could or should do about it. Three or four hundred years ago, that was true. Today, it's nonsense.

Resources management is our only alternative, an alternative that would have spared us this devastation. Controlled burns and/or timbering of public land provides at least three advantages: 1) Careful harvesting of mature timber would create jobs and stimulate the local economy, at the same time preventing wasteful incineration; 2) controlled burns and spot harvesting would help preserve the park's scenic aesthetic resources for generations to come; and 3) such action would help prevent the negative soil conservation fallout that occurs after hot fires and the resultant loss of fish habitat and downstream sedimentation of reservoirs.

The Park Service and Forest Service must be held accountable for an idealistic experiment in non-management that has backfired at the expense of all Americans and visitors from throughout the world who have seen and loved Yellowstone.

The people of America should demand resource management policies in wilderness areas and national parks that will protect all these precious internationally renowned treasures from the misguided notion that in order to save them we must first destroy them.

With much regret...I told you so.

(David A. Flitner, a rancher who lives 100 miles downwind from Yellowstone National Park, is also President of the Wyoming Farm Bureau.)

James M. Hagood
Attorney at Law
11772 West Asbury Place
Lakewood, Colorado 80228
Tel. (303) 969-8424

Sept. 20, 1988

Senator Malcom Wallop
Washington D. C. Office
237 SROB
Washington D. C. 20510-5002

Re: Yellowstone Fires; my previous letter to you
dated July 28, 1988 on the gross mismanagement in Yellowstone

Dear Senator Wallop:

I previously sent you a copy of my letter dated July 28, 1988 on the mismanagement in Yellowstone. I sent it to you because I am from Wyoming, I grew up in Wyoming, and I still spend time in Wyoming. In short, because you are an Senator from Wyoming I wanted you to have a copy expressing what I observed first hand in Yellowstone in July of 1988.

Since I wrote my letter in July, I have moved from California to the above referenced address in Colorado. You have called for the firing of top officials of the Dept. of Interior because of their malfeasance in office, and their breach of trust, and their derliction of duty. It is regrettable that you have been attacked for exercising your constitutional prerogatives as an U. S. Senator. Frankly, it took some courage on your part to request the firing of officials appointed by an President from your own political party.

When you made your request for firing you had months of input from the people of Wyoming on the gross derliction of duties of top officials in the Dept. of Interior.

The pack of wolves(beltway bandits, who euphemistical refer to themselves as "the new order cosmologists") that have been attacking you do not want any accountability, they urge that matters be swept under the rug, and covered up, and they want you to forego your obligations as an U. S. Senator to assure that an full review and oversight is carried out to further investigate the mismanagement practices in the Yellowstone fires.

I have never received any response to my July 28, 1988 letter which is attached hereto for your reference.

I would urge that you, as an member of the Energy and Natural Resource Committee have the oversight hearing on the Yellowstone fires conducted in Wyoming. My letter dated July 28 expressed the importance of having at least some of the hearings on this matter in Wyoming.

The Dept. of Interior and the Congress should allow the residents of Wyoming, who are the individuals who have first hand knowledge about the mismanagement practices to present testimony at the hearings. For months, the Dept of Interior has used its resources to manipulate the press.

Many people from Wyoming take exception to the attacks which have been made against you by the advocates for the pyrogenic practices to destroy Yellowstone Park.

When you demanded accountability, as an U. S. Senator you were representing the citizens who elected you to your office. It is regrettable that some do not want you to represent the citizens of Wyoming and the United States, and attack you for speaking out against the derlictions of duty which has caused the massive destruction of America's first national treasure. To obscure, and obsufucate the extent of the devastation, the Dept. of Interior has promoted misleading and unfounded speculation. I would note for you attention an letter by one of your constituents which is based on first hand observation. How many million acre fires have the top officials of the Dept of Interior observed first hand over an period of 75 years, with recorded, and documented results about their long term impacts. ? ?

Senator Wallop, I have never received an response to item No. 5 on page 5 of my July 28, 1988 letter. The Dept. of Interior has displayed their abilities to promote fires. Yet, when requested to present the documented basis for the full disclosue of all possible adverse impacts of the let burn fire operations, then the Dept. of Interior engages in an stone walling exercise, while it simultaneously puts out more fire propaganda to the press.

Frankly, your calling for the firing of top officials of the Interior Department was appropriate. Why should individuals who have been engaging in an massive derlic on of duty remain on the job when they have breached their trust responsibilites, and they no longer have the confidence of the citizens of Wyoming, and the citizens of the United States.

I would appreciate it if you could advise me when and where any Congressional hearings will be conducted on Yellowstone. I observed the fires first hand in Yellowstone in July, and I observed the mismanagement of the Dept of Interior to allow the fires to burn out of control. Also, I am qualified to testify because of my experience in environmental law matters. Therefore, I would request an opportunity to present testimony at any hearings.

I was born in Casper Wyoming, and grew up in Wyoming, and I visted Yellowstone approximately 10 times between 1950 and 1988. If I am provided an opportunity to testify, I will be supporting the demands for full accountability of those who were engaged in an derlection of their duties.

Frankly, Senator Wallop your demand for an firing of only one individual of the Dept. of Interior was restrained. I hope your Committee will exercise its full subpoena powers to throughly innvestigate this matter, including the manner in which the Dept. of Interior manipulated the press to put out misleading information about the fires, and to also, furnish misleading information to the State of Wyoming and to federal officials outside of the Dept. of Interior.

As you know, when ever you speak out against the advocates of destruction and pryomania, you are attacked by them. However, the citizens of Wyoming support your demands for accountability.

The parties, including the Congressman from Montana, who do not want you to exercise you responsibilites as an U. S. Senator from the State of Wyoming, should apologize to the citizens of Wyoming. The exercise of oversight responsibilites is not an empty display of "demagogic political aims" as your democratic attacker Congressman Williams, who is up for re-election, has suggested. Oversight includes calls for resignations, which you felt was appropriate, based on your own investigation, and you apparently have been following the situation closely, and have visted areas in Yellowstone to observe first hand what happened.

In any event, Congressman Williams owes an apology to the citizens of Wyoming for his remarks attempting to place an gag order over an U. S. Senator from Wyoming.

What Mr. Williams failed to mention is that he was an supporter of the positions which led to the devastation in Yellowstone,and that his actions contributed to the atmosphere which fostered the mismanagement by the Dept. of Interior.

Regrettably, when an U. S. Senator has an different view than Mr. Williams, he resorts to his attacks, some of which were recently printed in the Denver Post, most particularly as they concerned you.

Unfortunately, it remains to be seen whether Mr. Williams has the decency to apologize to the citizens of Wyoming. If he does his remarks can be circulated to the newspapers in the State of Wyoming so the citizens of Wyoming can read his apology.

Certainly, all Americans appreciate the hard work and courage of those who have fought against the fires which raged out of control. Mr. Williams inflammatory remarks printed in the Denver Post, September 18, 1988 Edition indicates that he was not keeping in touch with events in June and July of 1988.

I would note my letter of July 28, 1988 for Congressman Williams attention, if he is still in the dark as to "how the fires got out of control". As Congressman Williams can note, Mr. Hodel has not responded to my July 28, 1988 letter. Also, it might be noted that Mr. Hodel's recent claim(Sept. 1988) that he gave an order to Mr. Mott to stop the let burn operations in June of 1988 is in conflict with statements made by Mr. Hodel, which were printed in the national press in late July of 1988. In late July of 1988, Mr. Hodel was reported as supporting the let burn operations, and let burn decisions.

Hopefully, both you and Congressman Williams will work hard with all the resources that you can muster to get to the truth on this matter. I can appreciate that Congressman Williams wants to get more facts. When I noted that Congressional hearings were appropriate on this matter in my letter dated July 28, 1988, I felt that Congress should investigate this matter thoroughly in July of 1988, and not wait around while the Dept. of Interior allowed the let burn activities to continue.

However, if calls for resignations are made prior to any hearings, which are not going to be held until later this fall or winter, this should not deter any hearings.

If Congressman Williams wants to hold an award ceremony upon the completion of any hearings to present an achievement award to those in the Dept. of Interior who fostered the management policies to allow "let burn "fires to burn out of control in an on-going drought in an region where the moisture content of the trees was very low,and it was known that this situation existed as early as June of 1988, then he can make his speech at that time.

However, I encountered first hand the results of the management decisions of the Dept. of Interior in July of 1988, and that is why I set forth the statement of facts in my July 28, 1988 letter, along with an inquiry on congressional investigations at that time.

As part of the fact finding on this matter, hearings should be held in Wyoming. Also, I can appreciate that Congressman Williams could learn some facts which he does not presently know if he supported hearings in Wyoming and Montana on the Yellowstone matter.

Congressman Ben Nighthorse Campbell from Colorado has helped to frame the issues for the hearing. He stated recently that "only an very misguided person would advocate a let burn policy when we have 100 degree tempatures, 40 days drought, and 40 to 50 mph winds" As everyone knows, one of the major news stories in May and June was the drought. It impacted Yellowstone. It produced an low moisture content in the trees.

So, Gentlemen, how were so many individuals in decision making positions for the federal government mislead or misguided ?? Certainly, all of us would like to get the answer to that question, and allow parties, other than Park Service officials to testify before Congress on this matter.

Since this letter makes referece to Congressman Williams, and others, I am providinng them an copy, in the event that they may desire to respond further on this matter.

Sincerely,

James M. Hagood

James M. Hagood

Copy furnished:
Congressman Pat Williams

Congressman Ben Nighthorse Campbell

Senator Timothy E. Wirth

Governor of Wyoming
Mr. Michael Sullivan

Casper Star-Tribune

Denver Post

Ivan Million

JAMES M. HAGOOD
P.O. BOX 1033
Mill Valley, CA 94942
(415) 381-5930

July 28, 1988
Certified Mail/ Return Receipt

Secretary of the Interior
Mr. Donald Hodel
18th and C Street N. W.
Suite 6151, Mail Stop 6217
Washington D. C. 20240

Re: Destructive Mismanagement of Yellowstone Park
Freedom of Information Act Request
Submission of Evidence on deliberate acts to allow massive fires to cause significant enviromental damage to Yellowstone Park, and the State of Wyoming

Dear Mr. Hodel:

This concerns the above referenced matters which I am reporting to you along with evidence of deliberate mismanagement of federal properties to cause massive environmental and economic damage to the State of Wyoming.

You were reported in the national news on July 28, 1988 as supporting the decisions of letting wildfires burn unchecked. The fires which closed Yellowstone Park burned uncecked until they got out of control, and they have adversely impacted large areas of Wyoming.

FACTS

Attached are photographs which I personally took on July 16, 1988 of fires raging near Lewis Lake. (exhibits attached) On the 16th of July, this was an "let burn" fire, allowed to burn uncontrolled as a result of management decisions in the Dept. of Interior.

I took these photos just off the main highway running through Yellowstone, and I took the photographs at approximately 1 p. m. on the 16th of July, 1988. Earlier on the 16th of July, I drove the northern road loop around Yellowstone, and I went to the information office at the Park Headquaters and inquired about the fire suppression efforts. I did this because on the 16th of July the Park was filled with smoke, and one could not seek blue sky in many areas of the Park. At the information desk, I inquired about the "let burn" decisions being carried out in the area. I stated to the Park Officials that in many areas of the country fires are put out, and not allowed to burn. The response I received was "there is a lot more room in Wyoming to let the fires burn". I shook my head and walked out of the Park Information Office.

After I took the photos which I have attached hereto, I drove to the southern entrance of the Park. I stopped at the entrance gate, and I told the Park official on duty that there is an raging fire near Lewis Lake just up the road, and I inquired whether anything was being done about it. The fire was readily visible from the road, as depicted in the attached photos, and thousands of vistors to Yellowstone saw this fire, which the Park Service "let burn" uncontrolled, until Yellowstone Park's main Wyoming entrance was later closed down in July of 1988.

On the 16th of July, the Park official at the southern gate to Yellostone stated to me that" the official Park Service policy is to let the fires burn, and nothing is being done about the fires."

I attempted to discuss this matter further, and he told me to move on that this is the policy throughout the country. My wife, Sheila, my mother, Mary Hagood who lives in Casper, and my daughter, Michelle, were in the car with me, and witnessed the conversation, and were witnesses to the fires up the road from the southern entrance, and witnesses to my photo actions on the 16th of July. Why this fire was deliberately allowed to burn after the 16th of July brings into question many of the management decisions of the Dept. of Interior.

Between July 16 and 24, 1988, the Wyoming newspapers had reported about the decisions to let the fires "burn uncontrolled" By July 20th, the smoke had spread throughout the State of Wyoming. On the 20th of July, I was in Thermoplois, Wyoming and during the evenings the moon appeared bright red, a matter reported on the radio in the area as an atmospheric reflection caused by massive smoke from fires. On the 22nd of July I drove to Casper from Thermopolis. The skies near Casper were filled with smoke.
On the 24th of July, while I was in Casper there was massive amounts of smoke that had acccumlated in the the area, and I saw peoples eyes watering from the smoke. On national news on the 25th of July, it was reported that the southern entrance to Yellowstone was being closed, and that Grants Village in Yellowstone was being closed because of fire dangers. Later on the 26th, it was reported on national news that Old Faithfull Lodge was being closed due to fire dangers.

10 days after I had reported the fire near Lewis Lake, and encountered the results of the entrenched management decisions of the Federal Government affecting Yellowstone Park, I further realized that the Department of Interior may not be acting in a responsible and trustworthy manner, and that it may be engaged in a breach of trust detrimental to the State of Wyoming.

July is the peak of the tourist season in Wyoming.
Tourism is an vital industry to Wyoming which is currently in an depressed economic condition throughout many areas of that State. While I drove on the roads throughout Yellowstone, I observed that many sections had the conditions which were depicted in an Los Angles Times photo which appeared in the July 24, 1988 edition of the Salt Lake Tribune. In addition to the "let burn" decisions, there have been other decisions, the results of which are observably to anyone who travels to Yellowstone. I have visted Yellowstone over 10 times, primiarily in the 1950's, and have an basis for my concerns because of the conditions which I observed in Yellowstone in July of 1988.

My 1988 visit to Yellowstone Park has led me to conclude that the Federal Government has been engaging in reckless mismanagement decisions to allow Yellowstone Park to deterioate, and this is manifested in many areas besides the forests, and the roads.
In July of 1988 over 50,000 acres burned.
The "let burn" and " let deterioate" decisions of the Dept. of Interior must be closely examined to assure the prevention of damages to the areas in Yellostone, and surrounding areas.

As you know, the Federal Government in the past wanted to punish Wyoming treating it different from all of the states in the United States in order to withhold highway funds, and although Yellowstone Park is an National Park it appears that the massive road deterioation is an spill over product of the Federal Government's confrontational polices toward the State of Wyoming.
On July 27, 1988 it was reported in the national press that you considered it an waste of resources to fight wildfires in Wyoming, unless they endanger buildings, people or roads.
Your threshold of endangerment should be investigated, in view of the the 83,000 acres which have burned in Yellowstone, as of late July 1988

INVESTIGATIONS AND HEARINGS

I request to be notified whether the Dept. of Interior or any members of Congress are going to conduct any hearings in Wyoming. I would hope that the citenzens of Wyoming would be provided an opportunity to present other facts at an hearing to investigate the mismanagement of Yellowstone.

Since Yellowstone is a national treasure, I would urge that you and members of Congress conduct an through hearing on this matter, in appropriate cities in Wyoming to allow full citizen participation, and I would request an opportunity to present other comments at such an hearing.

Obviously, any hearings should be accompained with full notice of any scheduled hearings posted in the Newspapers throughout the State of Wyoming so as to provide the public an full notice and opportunity to attend such hearings in Wyoming.

FREEDOM OF INFORMATION ACT REQUEST
5 U. S. C. 552 et. seq.

Pursuant to 5 U. S. C. 552 et seq, the Freedom of Information Act , I request copies of the following within the statutory period provided:

1) Copies of the Dept. of Interior Reports or pages thereof which show the actual expenditures by the Federal Government for Yellowstone, and in particular the amounts shown on road expenditures between 1982 and 1987.

2) A copy of any documents or pages therof showing the expenditures made on roads throughout all the National Parks managed by the Park Service, and the amounts expended specifically on roads in Yellowstone Park between 1982 and 1987, in comparsion to other National Parks.

3) A copy of any documents or pages thereof which would relate to any statement made in the July 24, 1988 edition of the Salt Lake Tribune on the 1.1 billion maintenance program.(see attached article with sections noted.)

4) A copy of any 1985-1987 status reports on the road conditions in Yellowstone Park, and in particular a copy of any such status reports which have been reviewed by the Secretary of Interior's office concerning such conditions.

5) A copy of any environmental impact statement prepared by the Dept. of Interior concerning its major federal decisions to let burn thousands of acres in Yellowstone, in which the Department of Interior has circulated for comment an EIS to the Center for Atmospheric Research and other appropriate agencies on the envirnommental impacts of the tons of smoke caused to be placed over the State of Wyoming caused by "let burn" decisions which were firmly entrenched in the operations of the Interior Department prior to June of 1988.

The reason I am requesting the above information is because it is reported that the Congress of the United States appropriated what was described as an "gush of money" for the Interior Department for maintenance and roads. Yet in the same article it shows the massive deterioration of the roads in Yellowstone.(see Salt Lake Tribune July 24, 1988 article, attached)

PUBLIC ACCOUNTABILITY

I drove almost every section of the roads in Yellowstone in July of 1988, and the condition of many sections was similar to that depicted in the above mentioned photo of the Los Angles Times- a massive and wide spread condition of deterioration. Certainly, these conditions are not consistent with the "gush of money" in the billions which have been appropriated by the U. S. Congress, and you should explain whether your office has had an allocation problem, or have short changed Yellowstone Park. Certainly, you owe the People of the State of Wyoming an full explanation.

Officials of the Department of Interior should have to account to the Public on the many matters affecting Yellowstone. I would anticipate that the appropriate elected officials from the State of Wyoming will not allow the above noted matters to continue without appropriate corrective actions, and an opportunity for hearings in the State of Wyoming to provide full citizen participation from those in Wyoming, and other parties who are interested in these matters.

Therefore, I am forwarding an copy of this letter to appropriate elected officials from the State of Wyoming with the hopes that they will bring about full hearings and investigations on this matter in the State of Wyoming to allow an full opportunity for the citizens of Wyoming and others to comment on these matters further.

Sincerely,

James M. Hagood

James M. Hagood

Copies furnished:

Governor of Wyoming
Mr. Michael Sullivan

Senators from Wyoming
Mr. Alan Simpson
Mr. Malcolm Wallop

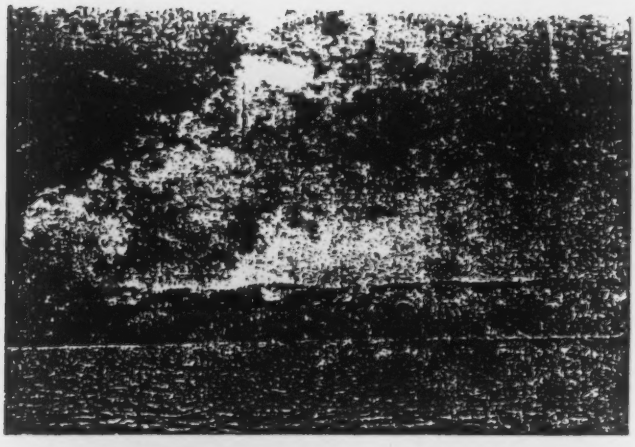
Congressman from Wyoming
Mr. Richard Cheney
Casper Office

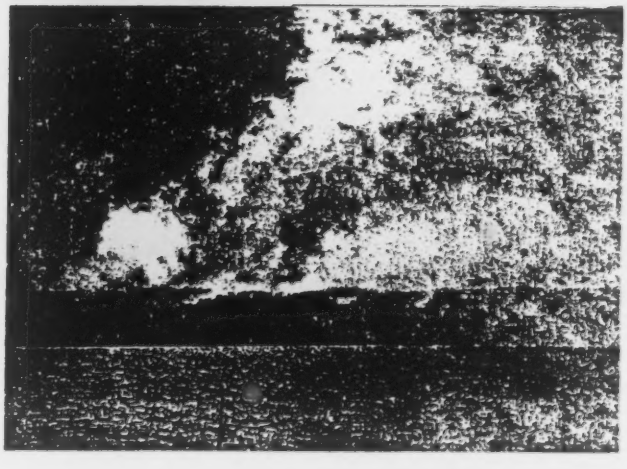
Mr. Tim Bommer
Attorney at Law
Jackson, Wyoming

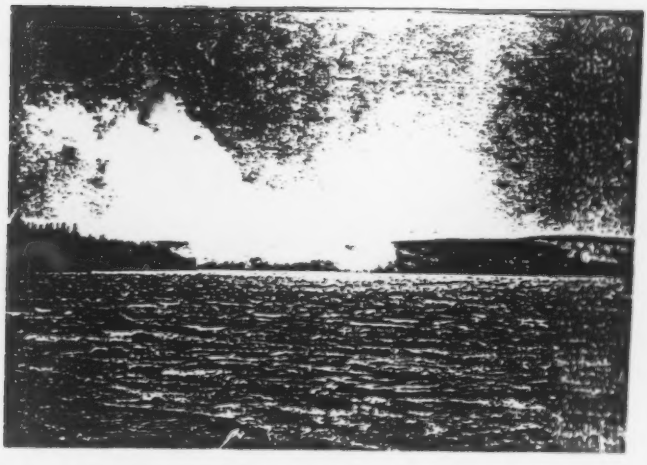
Mr. Steve Hagood
Attorney at Law
Casper, Wyoming

Casper Star Tribune

Los Angles Times







Hard Glass copies of Attached photos will be provided upon request

Photos taken on July 16, 1988 by IMH

Common C

However see photo

Reagan Receives Mixed Reviews For Park Care

By Maura Dolan
Los Angeles Times Writer

GRAND TETON NATIONAL PARK, Wyoming — When the Reagan administration came into office, its appointees promoted an environmental policy that conservationists predicted would produce turmoil for the country's national parks. There was talk by political appointees of turning over federal ranger activities to private companies, closing parks and expanding drilling and mining on park lands.

Nearly eight years later, the forecasts of doom have proved exaggerated. The conservationist lobby and Congress balked so strongly at the outset that the more extreme ideas never became formal proposals. Maintenance of parks under Reagan, while insufficient, has at least equaled that during other presidencies. The administration even surprised its critics by choosing a well-respected conservationist to head the park service.

The record, however, also shows that the early fears of many environmentalists were well-founded. The administration dragged its feet in acquiring private lands within park boundaries, failed to initiate legislation for new parks, advocated a policy that emphasized use at the expense of conservation and fought and often overruled the conservationist chosen to run the service, according to park officials and environmentalists.

"The administration has been good, but no better than past administrations, at funding maintenance and facility construction," said E. Destry Jarvis, a vice president of the Washington-based National Conservation and Parks Association, a park watchdog group. "But there's no question in my mind that this administration is the worst in history regarding parks when it comes to the issue of resource protection and conservation."

On the rugged stretch of snow-streaked mountains and sage-covered valleys of the Grand Tetons, the Reagan administration's legacy includes new roofs on park buildings, new campground furniture and resurfaced parking lots, a donation box or, as it is often derisively called, a "poor box" in the visitors center for [illegible] an entrance fee

The new roofs and paved roads came during a widely praised $1.1 billion maintenance program under former Interior Secretary James Watt. The sudden gush of money was typical of the park service's traditional bust-boom cycle of funding. Parks generally receive large infusions of money for a few years and then go several years without enough money to keep up with repairs. Finally things get so bad that another expensive program is launched.

Despite substantial improvements under the Reagan program, the next administration will find a lot of work remains to be done. A recent report by the General Accounting Office, the investigative arm of Congress, estimates that $1.9 billion is needed for repairs, construction and trail rebuilding at the nation's parks, recreation areas, national monuments and other federal scenic areas.

The entrance fee hikes, initiated by the Reagan administration, are generally supported by park superintendents. The administration has proposed returning about $20 million of $52 million raised by the higher fees in 1988 to go back to the parks as additional monies for the preservation of plants and wildlife, research and guides — a condition insisted on by Congress. The rest pays for programs previously funded by taxpayer revenues. At most national parks, entrance fees for a carload went from to $2 to $5.

The Reagan administration also sought to meet park needs by seeking private donations. Since Reagan took office, the parks have put out donation boxes and published "gift catalogs" featuring different projects to which the public can contribute. $300,000 to the park.

Among the projects funded [illegible] San Francisco-based [illegible] were the restoration of [illegible] the removal of an old [illegible] plant in the [illegible]

A cluster of homes has bee[n] at the base of the Grand

[illegible] head is pleased at the ability of th[e] parks to get help from the pub[lic] non-profit group called the Yose[mite] Foundation this year ga[ve]

It a recent banquet held to mark the end of a four-day conference of park superintendents, Mott passed out pin-on buttons that said "bring back the Wolf" over a picture of the animal's head. With a flick of a switch on the back of the buttons, the wolf's eyes lighted up, blinking on and off in red [illegible]

* How many plants were destroyed in the 83,000 acres burned in Yellowstone

The administration has been good, but no better than past administrations, at funding maintenance and facility construction," said E. Destry Jarvis, a vice president of the Washington-based National Conservation and Parks Association, a park watchdog group. "But there's no question in my mind that this administration is the worst in history regarding parks when it comes to the issue of resource protection and conservation."

On the rugged stretch of snow-streaked mountains and sage-covered valleys of the Grand Tetons, the Reagan administration's legacy includes new roofs on park buildings, new campground furniture and resurfaced parking lots, a donation box or, as it is often derisively called, a "poor box" in the visitors' center for visitor donations, an entrance fee that has jumped from $2 to $10, 1,000 additional acres obtained in a land-swap and a costly land condemnation.

The Reagan administration also sought to meet park needs by seeking private donations. Since Reagan took office, the parks have put out donation boxes and published "gift catalogs" featuring different projects to which the public can contribute.

At Yosemite National Park in California, Superintendent Jack More-parks to get help from the public. A non-profit group called the Yosemite Foundation this year gave $300,000 to the park.

Among the projects funded by the San Francisco-based group last year were the restoration of a meadow, the removal of an old sewage treatment plant in the congested valley, the reintroduction of bighorn sheep, the rebuilding of trails and the hiring

At a recent banquet held to mark the end of a four-day conference of park superintendents, Mott passed out pin-on buttons that said "Bring Back the Wolf" over a picture of the animal's head. With a flick of a switch on the back of the button, the wolf's eyes lighted up, blinking on and off in yellow.

A buffalo in Yellowstone Park slows traffic as it crosses a road that is badly in need of repairs. The funds for doing the resurface work are lagging behind the needs.

—Los Angeles Times Photo

Who Knows What Books Lurk Be

By Joan Mower
Associated Press Writer

One customer of Mr. Bancroft

Pot holes and massive deterioration are widespread on roads in Yellowstone

95-715 222

Park Service fiddles around while park burns

Editor:

There are very few places in the civilized world where fire is allowed

Continued on next page

Sunday, August 28, 1988

From preceding page

to burn. The timber lost, the animals killed or seriously burned, the plant species that may never return. It's all a tragic loss.

Fires the size of the fires in Yellowstone and the wilderness areas do cause serious problems of soil erosion and water siltation.

What is not being said is that because of siltation, not only our soils but also our lakes are being killed. Those lakes surrounded by fire of the intensity and heat of these fires are dead lakes.

They will not produce anything except perhaps some mosquitos for several years to come.

Some forest, park and conservation people are telling us that regeneration usually occurs within a year or two. Hogwash. From my window I see a fire-caused scar upon our land that is over 50 years old.

I've not seen anyone study this area as it was a man-caused fire and not worthy of study. I cannot see any real return to its natural climax status, but then it's only been 50 years. Where then do they get two or three years? They make it sound like you have a forest in no time at all.

I plant eight to 10-foot evergreens in my yard, use fertilizer and water and provide optimum growing conditions and I see little change in two years. Why do trees grow so much faster in their natural surroundings?

What they are really saying is that mosses and lichens, bacteria, mold and certain insects will start to come back into the community.

Then 50 years later you may have a base for some annual plants, then in another 50 to 100 years your biannuals and perennial plants, until finally in just 350 short years you have a blue spruce and Engleman spruce climax forest.

Before I'm told that I'm presenting a worst case scenario, I should point out that it's no worse than the best case scenario as is also being presented.

I know that some areas where the heat was not intense may regenerate quicker or that in areas along streams and some meadows where water is plentiful, regeneration will occur quicker. But in two years we will not see deer and elk grazing peacefully as is also being presented and, most importantly, we will not see a forest growing.

We are asked by our friends to wait and see if fire does not provide a better habitat for our wildlife that will compensate for the impact on wildlife habitat that has occurred on timber sales in the last five decades.

Although this is not a lumbering issue to me, I already know the answer as I look out my window at the 50-year-old scar on our land.

I know by driving my four-wheel drive into areas that have been timbered 50 years ago that there is a real and significant difference. The timbered area has regrowth with trees 35 to 50 feet tall. The fire-scared area out my window as yet has not produced a single tree.

Is a fire that consumes thousands of acres not more devastating to our wildlife than a clear cut of 40 to 60 acres?

I know researchers have a legitimate place in our society but natural research, unlike true scientific research, usually cannot provide a test group.

Therefore, it is likely the bias of the person doing the research controls the conclusions. In other words, all researchers with the same information do not come to the same conclusions. This type of research is of little value to me in deciding if fires should be allowed to burn.

I do not have to wait to see the effect of the fires in Yellowstone on the business community of Dubois and other towns in Wyoming. The effect is just the same as to our forest: devastation, stagnation, and ruin. This effect does not need to be studied, only seen and felt.

I am not opposed to our environmentalist friends. Just opposed to a "let burn" policy in our parks and forests. I'm wondering how much money the Park Service spent on fiddles this past summer, Nero?

IVAN MILLION
Dubois

(This letter was shortened.)